

Table 1-2. Equipment Matrix, Model 28 Typing Reperforators and Tape Printer Keyboards

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		COVERS	ENC	TYPING REPERFORATORS				KEYBOARDS	R0 BASES			ESA'S/PCB'S				MOTORS				50.0	45.5	74.2	45.5	56.8	74.2	50.0	75.0	45.5	50.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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FIGURE NUMBER		LRC202BR	LRC205BR	LPC200BR	LPC211BR	LPC202BR	LPC200BR	LRR94WA	LPR35BRD	LPR40AWA	LPR53BRP	LPR62BRP*	LPR72BRP	LPR85BRP	LPR83BRP	LPR88AWA	LTR724WABRP	LTRKIARN	LTRKSARN	LTRK8ARNBRS	LTRIARN	LRB8	LRB31	LRB49	LRB57	LRB62*	TP174459	5-18 5-16	5-11	ESA321230	5-14	ESA321231	5-23	ESA323813	5-12	LLK303142	5-24	SMD323810	5-25	CMD321991	5-29	PS321290	5-8	LMU3	5-8	LMU24	5-8	LMU38	5-8	LMU41	TP152766	TP159660	TP159700	TP161293	TP161294	TP161295	TP163504	TP163505	TP173795	TP194927																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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NO.	NOTES										
1.	<p>WIRING LEGEND:</p> <p>DISTANT TERMINATING AREA</p> <p>DISTANT TERMINATING DESIGNATION</p> <p>F-N-W-BL</p> <p>WIRE COLOR CODE</p>										
2.	<p>COLOR CODE:</p> <table border="0"> <tr> <td>BK - BLACK</td> <td>G - GREEN</td> </tr> <tr> <td>BR - BROWN</td> <td>BL - BLUE</td> </tr> <tr> <td>R - RED</td> <td>P - PURPLE</td> </tr> <tr> <td>O - ORANGE</td> <td>S - SLATE</td> </tr> <tr> <td>Y - YELLOW</td> <td>W - WHITE</td> </tr> </table>	BK - BLACK	G - GREEN	BR - BROWN	BL - BLUE	R - RED	P - PURPLE	O - ORANGE	S - SLATE	Y - YELLOW	W - WHITE
BK - BLACK	G - GREEN										
BR - BROWN	BL - BLUE										
R - RED	P - PURPLE										
O - ORANGE	S - SLATE										
Y - YELLOW	W - WHITE										
3.	<p>TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESES ARE FOR REFERENCE AND ARE NOT MARKED ON COMPONENTS.</p>										
4.	<p>TERMINALS ON CONNECTOR SHOWN AS VIEWED FROM SOLDER END.</p>										
5.	<p>NORMALLY OPEN (NO) AND NORMALLY CLOSED (NC) CONTACTS ARE SHOWN WHEN THE REPERFORATOR IS IN THE STOP (IDLE) POSITION.</p>										
6.	<p>THE SPACING (S) SIDE ON THE CODE READING CONTACTS ARE NORMALLY CLOSED. THE MARKING (M) SIDE OF THE CODE READING CONTACTS ARE NORMALLY OPEN.</p>										
7.	<p>WHEN THE AUXILIARY CONTACTS ARE OPERATED FROM A SINGLE CYCLE FUNCTION CAM, THE CONTACTS NEAREST THE MOUNTING BRACKET ARE NORMALLY CLOSED.</p> <p>WHEN THE AUXILIARY CONTACTS ARE OPERATED FROM A DOUBLE CYCLE FUNCTION CAM, THE CONTACTS FARTHEST FROM THE MOUNTING BRACKET ARE NORMALLY CLOSED.</p>										
8.	<p>GENERAL NOTE: WIRING OF INDIVIDUAL COMPONENTS IS DETERMINED BY REFERRING TO THE CABLE ASSEMBLIES SPECIFIED ON THE UNIT B/M.</p>										
9.	<p>WHEN USING THE 162306 CABLE ASSEMBLY WITH THE LRPE8, CONNECT THE W-BL WIRE (NORMALLY CONNECTED TO G4) TO G6.</p>										
10.											
11.	<p>WHEN COMMON CONNECTION IS USED, D.C. MUST BE PROVIDED FOR MAGNETS OTHER THAN 224M WHICH OPERATES ON A.C. OR D.C.</p>										
12.	<p>FOR WIRING OF BACKSPACE MAGNET ON LAK KEYBOARD MOUNTED PERFORATORS, REFER TO ASSOCIATED LAK WIRING DIAGRAM.</p>										
13.	<p>SELECTOR MAGNETS MUST BE STRAPPED FOR 60 MILLIAMPERE OPERATION WHEN 179615 AND 179618 R.F. SUPPRESSION MODIFICATION KITS ARE USED WITH REPERFORATOR SET.</p>										
10	<p>ON UNITS EQUIPPED WITH THE 173850 SHIELDED CABLE, THE STRAP BETWEEN TERMINALS C-35 AND C-36 IS OMITTED AND THE "G" WIRE OF THE CABLE IS CONNECTED TO TERMINAL C-35. IF THE UNIT EQUIPPED WITH THE 173850 SHIELDED CABLE IS USED ON A BASE NOT CONTAINING PROVISIONS FOR R.F. SUPPRESSION (INCLUDING BELL SYSTEM) REMOVE THE "G" WIRE FROM TERMINAL C-35 AND ADD STRAP BETWEEN TERMINALS C-35 AND C-36</p>										
14	<p>THE LPR 66 SELECTOR MAGNET ASSEMBLY SHALL BE STRAPPED IN PARALLEL FOR 500 MA OPERATION</p>										

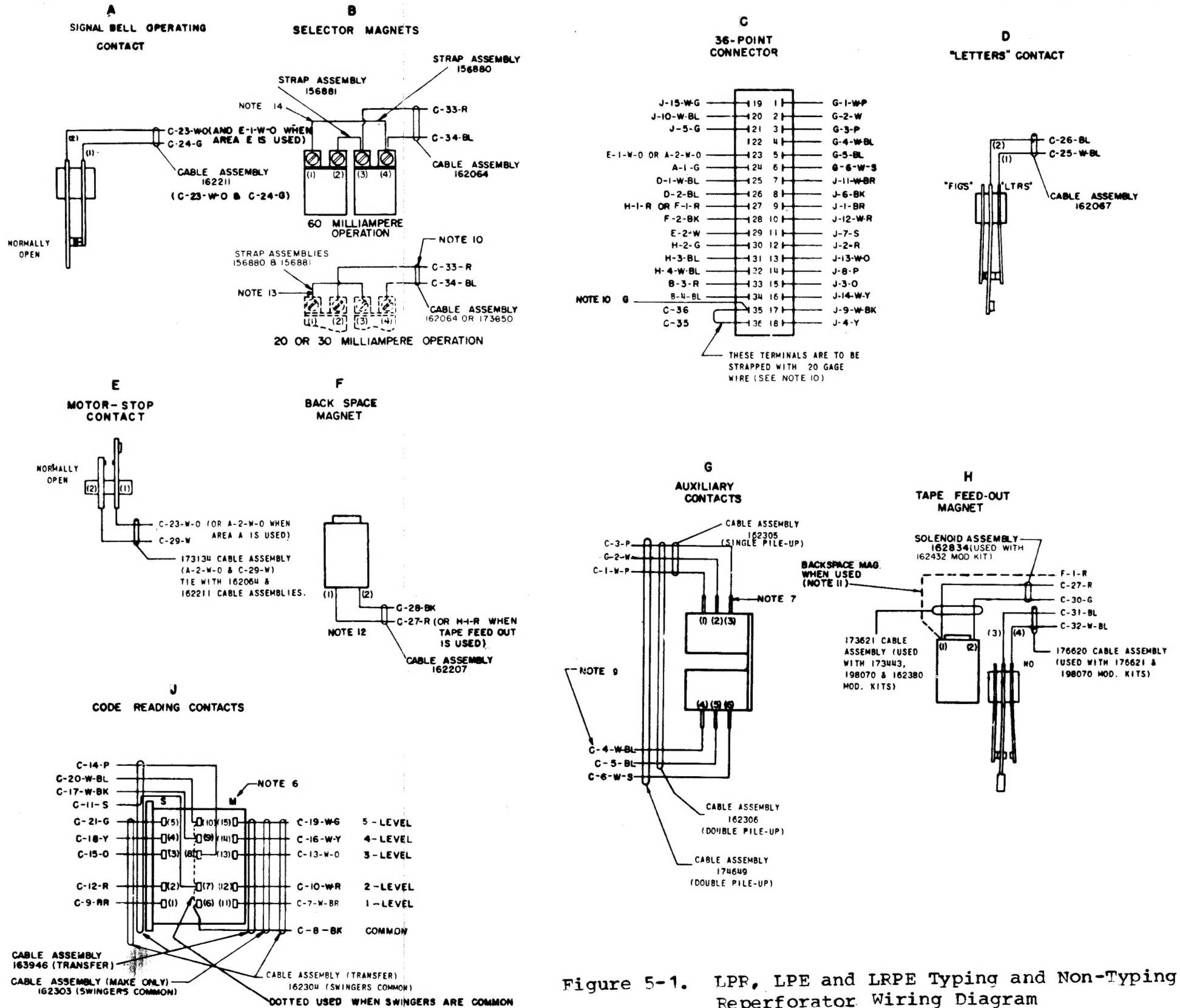
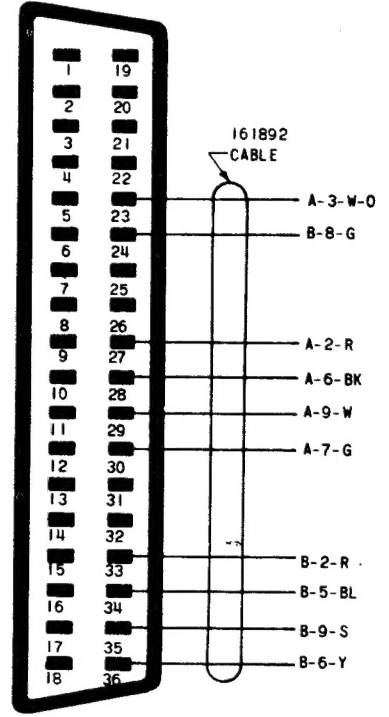


Figure 5-1. LPR, LPE and LRPE Typing and Non-Typing Reperforator Wiring Diagram

C
REPERFORATOR
CONNECTOR



NO.	NOTES
1.	WIRING LEGEND: <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 10px; margin-right: 5px;"></div> <div> DISTANT TERMINATING AREA DISTANT TERMINATING DESIGNATION A-1-W-BL </div> </div> <div style="margin-left: 100px;"> COLOR CODE </div>
2.	COLOR CODE: BK - BLACK G - GREEN BL - BLUE Y - YELLOW BR - BROWN W - WHITE R - RED S - SLATE P - PURPLE O - ORANGE
3.	UNIT WIRED FOR 115V AC INPUT.
4.	CONNECTORS VIEWED FROM SOLDER TERMINAL ENDS.
5.	NUMBERS IN PARENTHESIS ARE FOR REFERENCE AND ARE NOT NECESSARILY SHOWN ON COMPONENTS.
6.	WHEN SOLDERING CABLE TO INDICATOR LIGHTS, BEND TERMINALS OUTWARD 90°.
7.	THESE SPARES ARE PART OF THE 161878 CABLE AND ARE TIED BACK AT THE F CONNECTOR.
8.	GROUND STRAP TO LEFT FRONT MTG. STUD ON BASE.
9.	TERMINAL NO. 3 TO BE CONNECTED TO A GROUND SCREW ON THE BASE.
10.	MATING CONNECTOR 159541
11.	WIRING ON UNITS WITHOUT "Q" FUSE HOLDER.
12.	WIRING ON UNITS WITH "Q" FUSE HOLDER.
13.	FOR LTRK1 WITH 179615 MOD. KIT SEE 7220WD.
14.	FOR ASSOCIATED SCHEMATIC REFER TO: 8443WD
15.	REFERENCE SPEC. FOR TELETYPE CORP. EMPLOYEES ONLY: 6759S, 6133BS.
16.	WHEN SYNCHRONOUS PULSE OPERATION IS REQUIRED CONNECT CMD LEADS AS SHOWN.

17.	LTRK1 KEYBOARDS INCLUDE THESE ITEMS. STRAPS 151818 AND 151819 ARE USED ON LTRK 5 AND LTRK 6 KEYBOARD.
18.	POWER INPUT MAY BE CONNECTED DIRECTLY TO THE "A" TERMINAL STRIP AS SHOWN. THE F2 AND F11 LEADS SHOULD BE TAPED AND TIED. POWER ALSO MAY BE CONNECTED THRU THE "F" MATING CONNECTOR AT "F2" AND "F11".
19.	"DR" INDICATES DRAIN WIRE.
20.	INDICATES 18 AWG WIRE. (X)

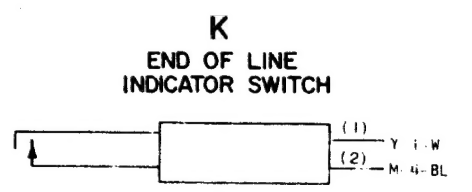
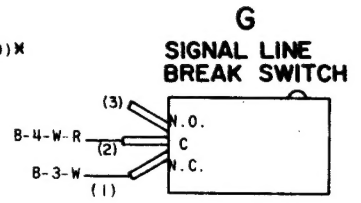
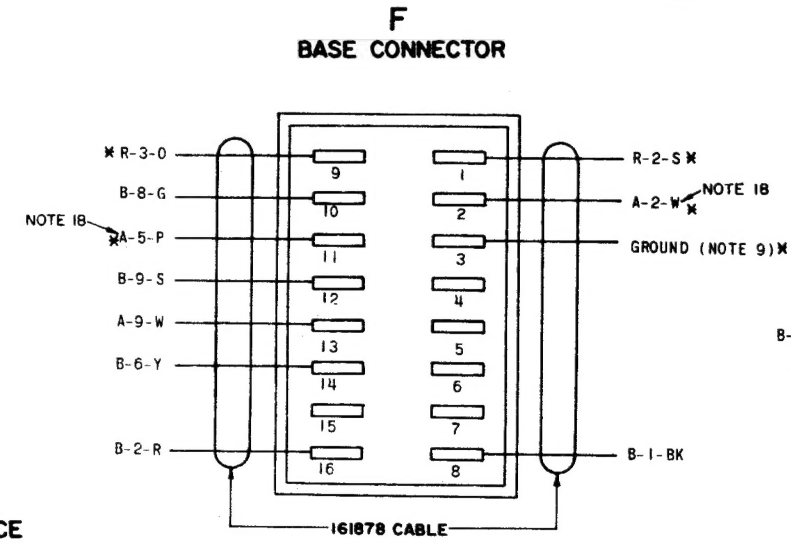
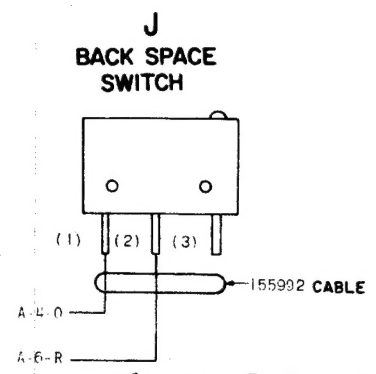
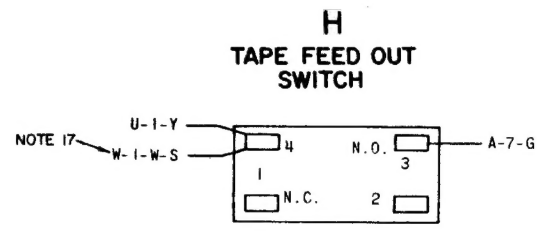
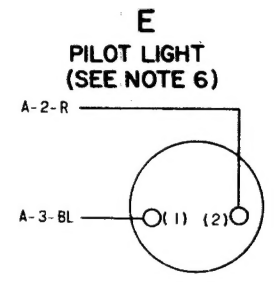
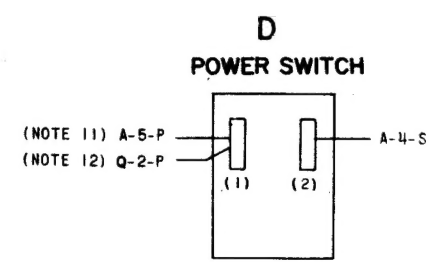
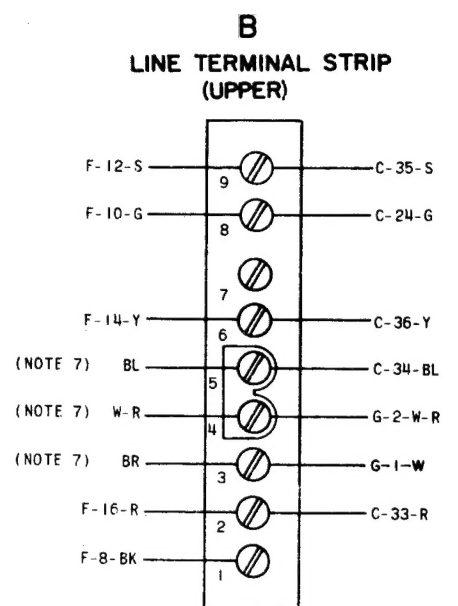
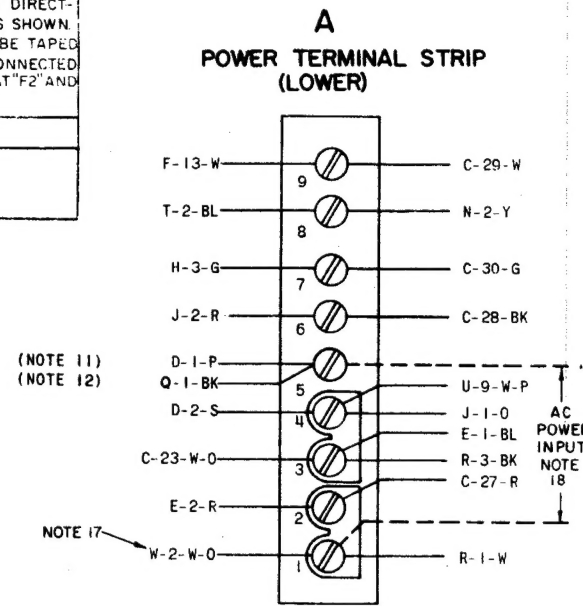


Figure 5-2. LTRK1, 2, and 10 Send-Receive Typing Reperforator Keyboard Wiring Diagram (Sheet 1 of 2)

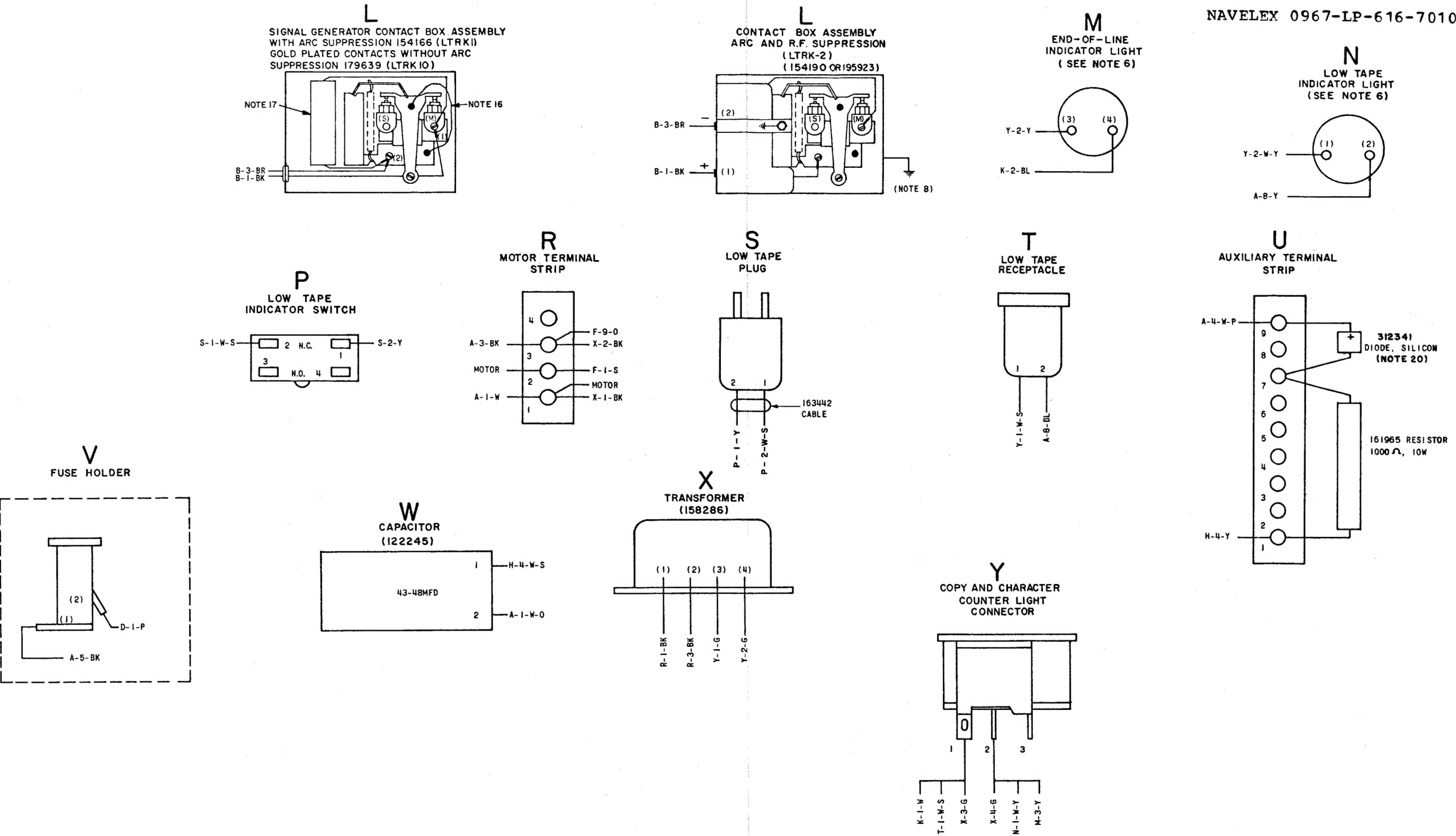


Figure 5-2. LTRK1, 2, and 10 Send-Receive Typing Reperforator Keyboard Wiring Diagram (Sheet 2 of 2)

NO.	NOTES
1.	FOR ACTUAL WIRING DIAGRAMS OF INDIVIDUAL UNITS. SEE WD NUMBERS OF COMPONENT UNITS. 3574WD - LTRK-1 2900WD - LMU3,4,6
2.	LEGEND: ○ A POWER TERM. STRIP ON LTRK (LOWER) ○ B LINE TERM. STRIP ON LTRK (UPPER) ○ U AUX. TERM. STRIP ON LTRK (REAR) R MOTOR TERM. STRIP ON LTRK C 36 POINT CONN. ON LTRK F 16 POINT CONN. ON LTRK S LOW TAPE CONN. (PLUG) T LOW TAPE CONN. (RECEPTACLE) Y CHAR. COUNTER & COPY LAMP CONN. IN COVER
3.	ALL APPARATUS IS SHOWN IN UN-OPERATED OR DE-ENERGIZED POSITIONS.
4.	RESISTANCE VALUES IN OHMS CAPACITANCE VALUES IN MICROFARADS
5.	USE SYNCHRONOUS MOTOR ON REGULATED 60 CPS ($\pm 75\%$) AC POWER.
6.	OPTIONS: (A) - WIRING WITH FUSE IN CIRCUIT (B) - WIRING WITHOUT FUSE IN CIRCUIT (C) - .060 AMP. SIGNAL LINE OPERATION (D) - .020 AMP. SIGNAL LINE OPERATION
7.	NETWORK NO. TELETYPE NO. 153631 470 0.11
8.	SL-BL INDICATES SLOW BLOWING.
9.	REFERENCE SPEC FOR TELETYPE CORP. EMPLOYEES ONLY. 61269S.

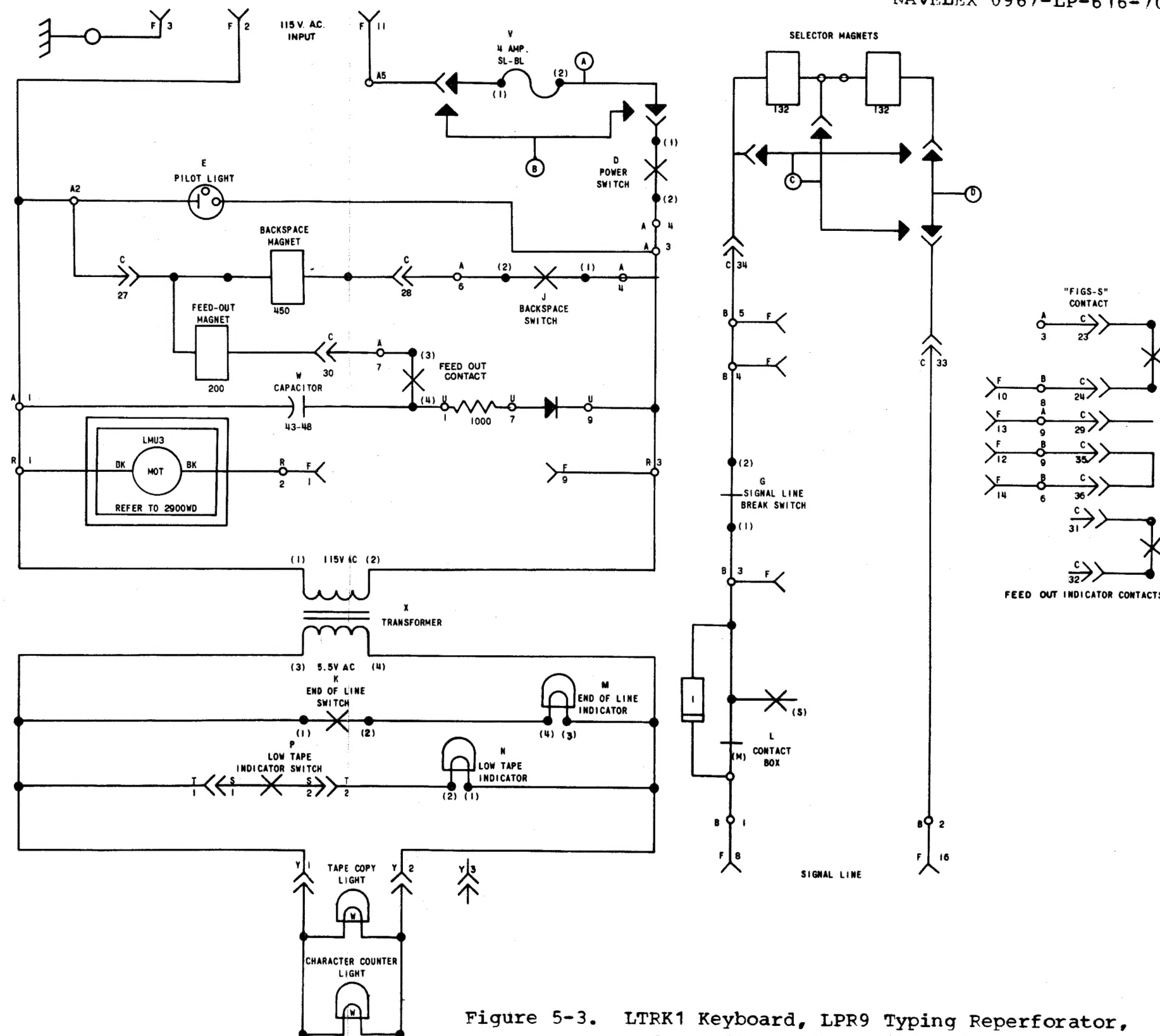


Figure 5-3. LTRK1 Keyboard, LPR9 Typing Reperforator, and LSRC200 Cabinet Schematic Diagram

NO.	NOTES
1.	WIRING LEGEND: DISTANT TERMINATING AREA DISTANT TERMINATING DESIGNATION A-1-W-BL WIRE COLOR CODE
2.	COLOR CODE: BK - BLACK G - GREEN BR - BROWN BL - BLUE R - RED P - PURPLE O - ORANGE S - SLATE Y - YELLOW W - WHITE
3.	UNIT WIRED FOR 115 VOLTS AC POWER INPUT.
4.	CONNECTORS VIEWED FROM SOLDER TERMINAL ENDS.
5.	WHEN SOLDERING CABLE TO INDICATOR LIGHTS, BEND TERMINALS OUTWARD 90°
6.	UNITS INCLUDE MATING 16 PT. CONNECTOR (159541) FOR CUSTOMERS USE.
7.	THESE SPARES ARE PART OF THE 161878 CABLE AND ARE TIED BACK AT THE F CONNECTOR.
8.	IN THE 16 PT. CONNECTOR, IT IS NECESSARY TO STRAP TERMINALS 1 AND 9.
9.	GROUND STRAP TO LEFT FRONT MOUNTING STUD ON BASE.
10.	TERMINAL 3 TO BE CONNECTED TO A GROUND SCREW ON BASE.
11.	ROUTE THE 164379 CABLE ALONG THE RIGHT AND INSIDE SURFACES OF THE KEYBOARD, AND SOLDER TO PINS 4 AND 5. TIE CABLE ASSEMBLY SECURELY TO BASE STRUCTURE.
12.	TAPED AND TIED BACK TO CABLE ASSEMBLY.
13.	POLARITY MUST BE MAINTAINED ONLY WHEN 154190 FILTER IS USED. POLARITY MAY BE DISREGARDED WHEN 195923 FILTER IS USED. COLOR CODING OF FILTER LEADS DOES NOT APPLY TO 195923 FILTER.
14.	FOR SCHEMATIC WIRING DIAGRAM, SEE 4953WD, SIMILAR TO 4797WD.
15.	WIRING ON UNITS WITHOUT Q FUSE HOLDER.
16.	WIRING ON UNITS WITH Q FUSE HOLDER.

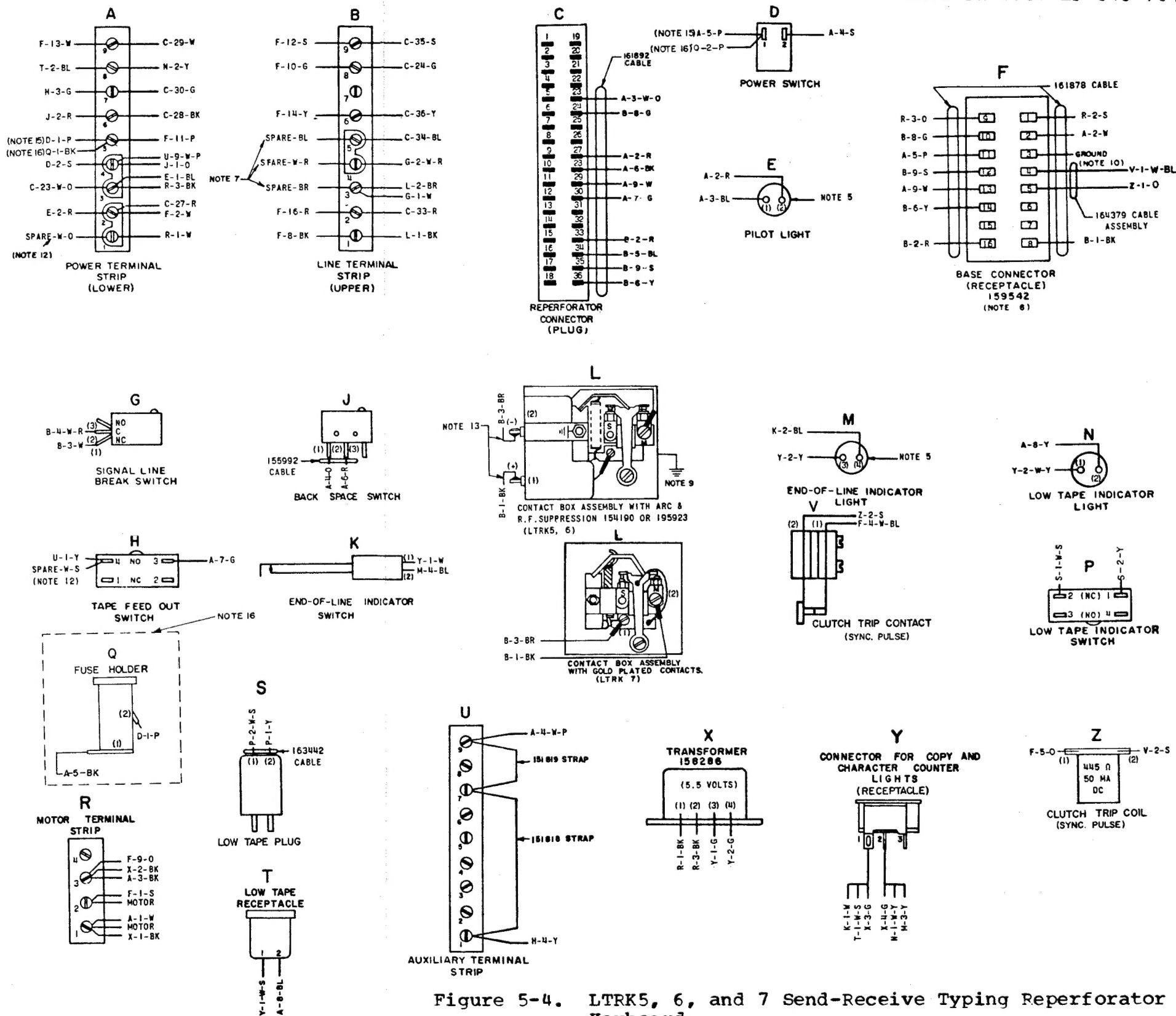


Figure 5-4. LTRK5, 6, and 7 Send-Receive Typing Reperforator Keyboard

NOTES	
1.	FOR ACTUAL WIRING DIAGRAMS OF INDIVIDUAL UNITS SEE WD NUMBERS OF COMPONENT UNITS.
	4952WD MODEL 28 SEND-RECEIVE BASE LTRK 5,6,7
	2900WD MOTOR UNITS — LMU3,LMU3B
	3628WD TYPING REPERFORATOR LPR 53
2.	LEGEND
	○ A POWER TERMINAL STRIP ON LTRK (LOWER)
	○ B LINE TERMINAL STRIP ON LTRK (UPPER)
	○ U AUXILIARY TERMINAL STRIP ON LTRK (REAR)
	○ R MOTOR TERMINAL STRIP ON LTRK
	◀ C 36 POINT CONNECTOR
	◀ F 16 POINT CONNECTOR
	◀ S LOW TAPE CONTACT (PLUG)
	◀ T LOW TAPE CONTACT (RECEPTACLE)
3.	ALL APPARATUS IS SHOWN IN UN OPERATED OR DE-ENERGIZED POSITIONS.
4.	RESISTANCE VALUES IN OHMS (—) CAPACITANCE VALUES IN MICROFARADS (MFD)
5.	CIRCUITS SHOWN FOR .060 AMP. NEUTRAL SIGNAL LINE OPERATION. FOR .020 AMP. LINE CURRENT, ADD DASHED LINE (---) CONNECTION AND OMIT CONNECTIONS MARKED (*).
6.	USE SYNCHRONOUS MOTOR ON REGULATED 60~ (±1%) AC POWER ONLY.
7.	COIL OPERATES ON DC, 50 MA. PULSE ONLY.
8.	DOT DASH ——— LINES INDICATE FILTERING, SHIELDING AND SUPPRESSION NETWORKS.
9.	CUSTOMER TO STRAP TERMINALS 1 AND 9 ON PLUG.
10.	3 SPARE WIRES TIED BACK AT F CONNECTOR
11.	TWO SPARE WIRES TAPED AND TIED BACK TO CABLE ASSEMBLY.

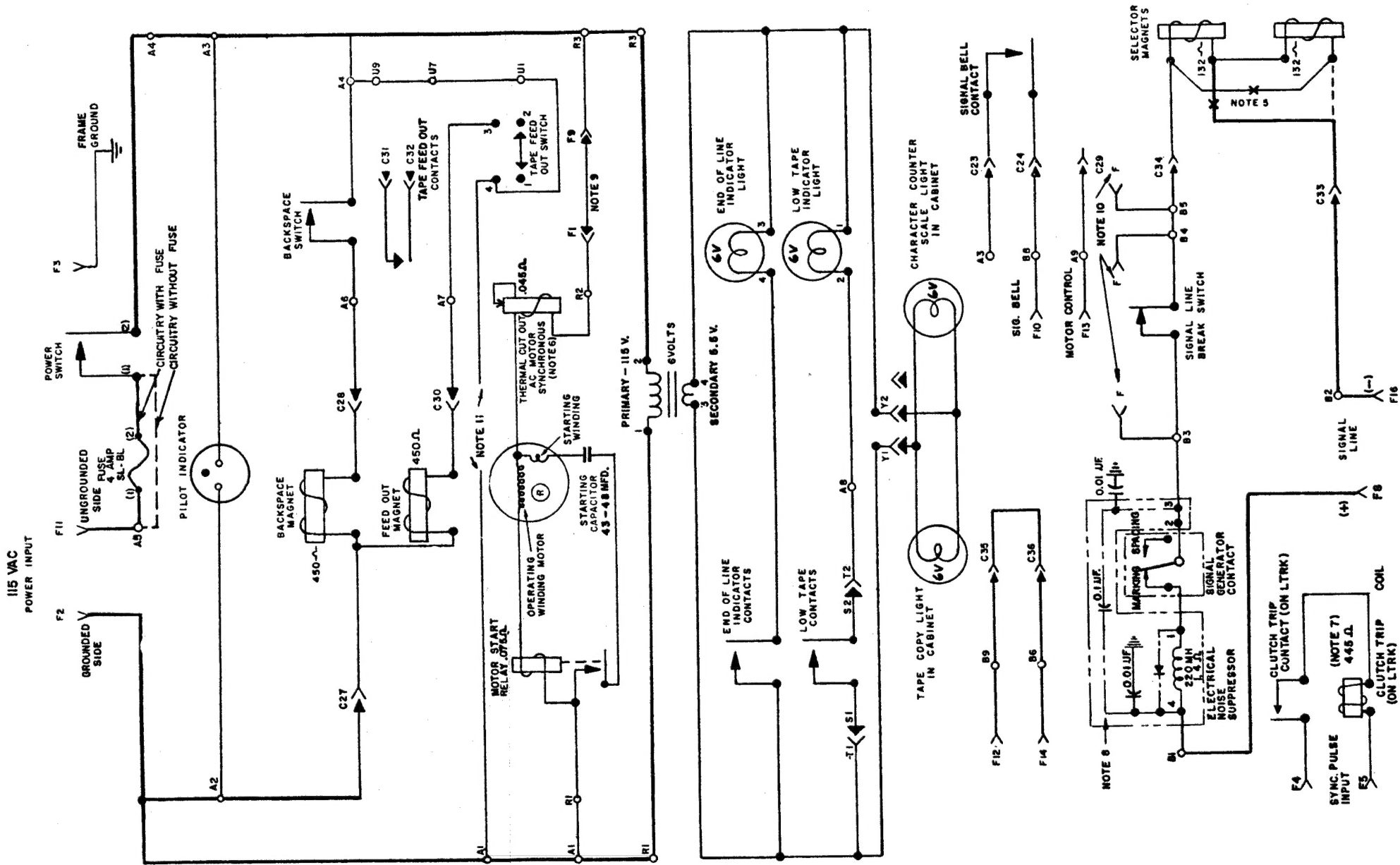


Figure 5-5. LTRK5, 6, and 7 Send-Receive Typing Reperforator Keyboard, and LPR53 and 9 Typing Reperforator Schematic Diagram

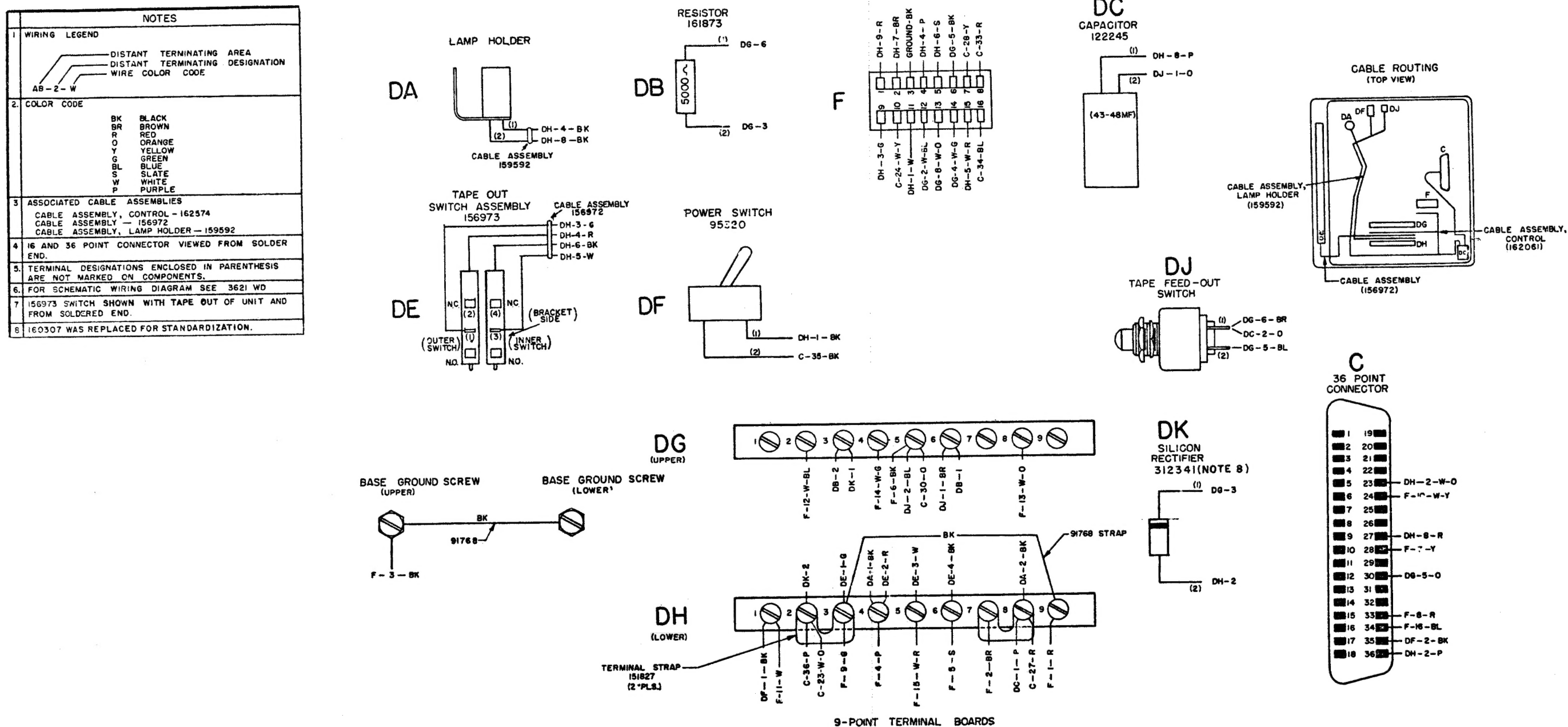


Figure 5-6. LRB8, 41, 49, and 57 Reperforator Base Wiring Diagram

<div></div>		NOTES	
1.	FOR ACTUAL WIRING DIAGRAMS OF INDIVIDUAL UNITS SEE BELOW:		
	3628 WD	REPERFORATOR	
	2900 WD	MOTOR UNITS - LMU24,56	
	4354 WD	TYPING REPERFORATOR BASE	
		LRB 31,62	
2.	LEGEND:		
	DG	TERMINAL BLOCK (ON BASE)	
	DH	TERMINAL BLOCK (ON BASE)	
	C	36-POINT CONNECTOR	
3.	ALL APPARATUS IS SHOWN IN UNOPERATED OR DE-ENERGIZED POSITIONS.		
4.	(A) RESISTANCE VALUES IN OHMS (Ω)		
	(B) CAPACITANCE VALUES IN MICROFARADS (MFD)		
5.	CIRCUITS SHOWN FOR .020 AMP. NEUTRAL SIGNAL LINE OPERATION. FOR .060 AMP. LINE CURRENT, ADD DASH LINE (---) CONNECTION AND OMIT CONNECTION MARKED (—X—) ON SELECTOR MAGNETS.(SEE 3628 WD LPR ACT. WD.)		
6.	USE SYNCHRONOUS MOTOR ON REGULATED 60 \sim ($\pm 1\%$) A.C. POWER ONLY. GOVERNED MOTORS AND OTHER POWER CIRCUITS OPERABLE ON 50 TO 60 \sim UNREGULATED A.C.		
7.	SL-BL INDICATES SLOW BLOWING.		
8.	FAN USED ON LRB 62 ONLY.		
9.	TOP TAPE OUT CONTACTS WIRING LEGEND.		
	LRB 31	FROM TO	LRB 62 FROM TO
		DE 4 DH6	DE 4 DG6
		DE 3 DH5	DE 3 DG3

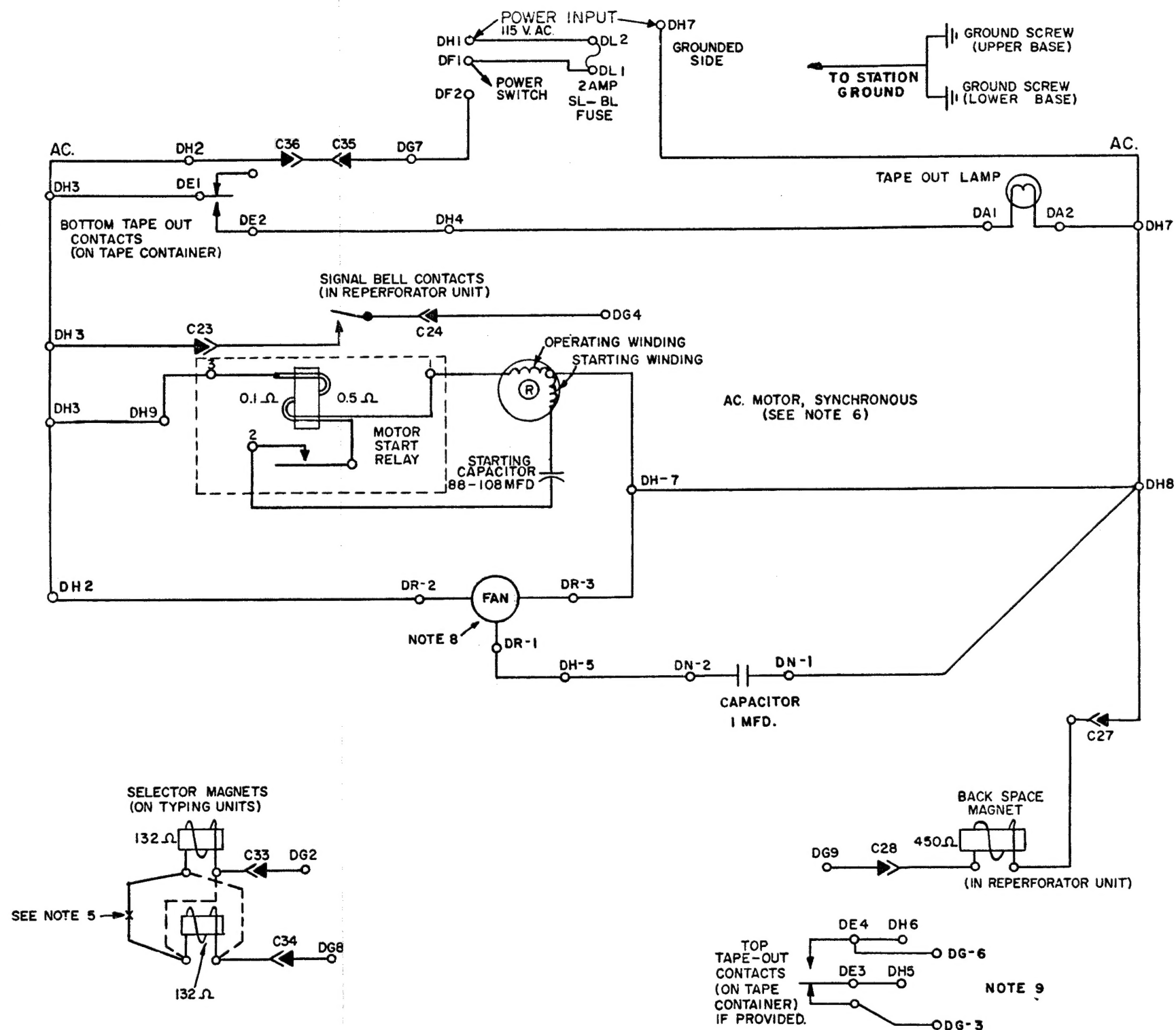
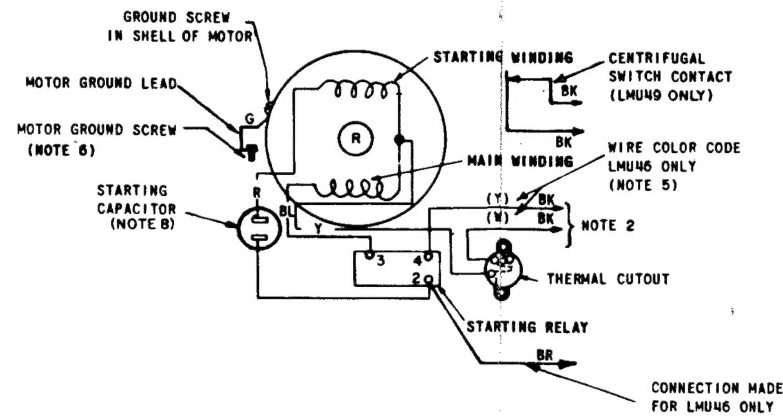


Figure 5-7. LRB31 and 62 Compact ROTP Reperforator Base and LPR40 Typing Reperforator Schematic Diagram

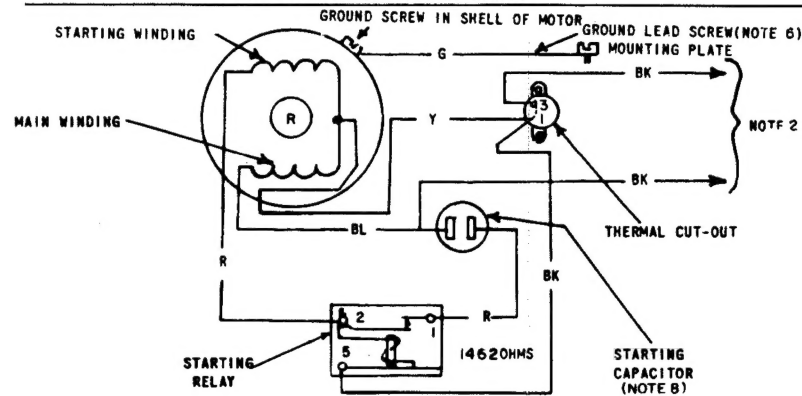
SYNCHRONOUS MOTOR UNITS

NAVELEX 0967-1P-616-7010

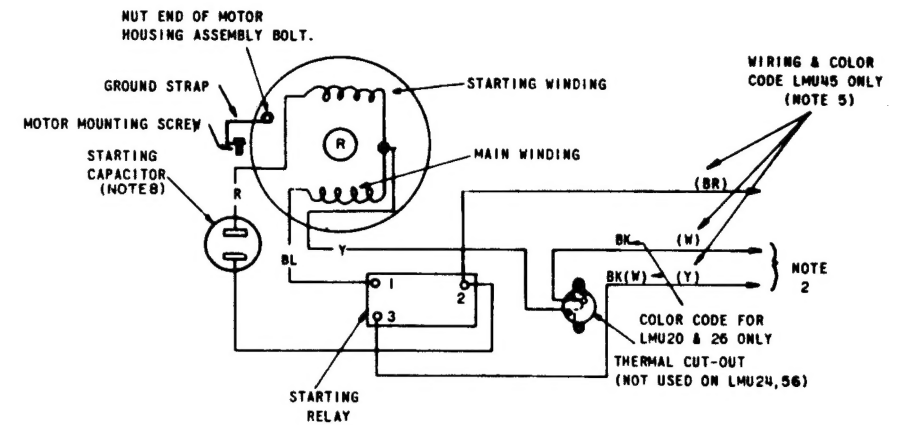
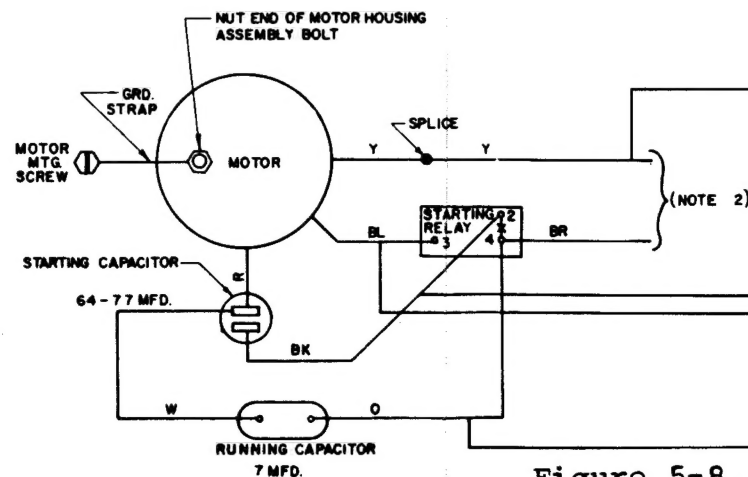
NO.	NOTES														
1.	SYNCHRONOUS MOTOR OPERATES ON REGULATED FREQUENCY ($\pm 0.75\%$) MAXIMUM AC ONLY.														
2.	CONNECT EITHER WIRE TO DESIGNATED TERMINALS OF UNIT TERMINAL BLOCK, PER WIRING DIAGRAM OF ASSOCIATED UNIT.														
3.	MOTOR LEADS OF SAME COLOR ARE INTERCHANGEABLE.														
5.	EXTERNAL NOISE SUPPRESSION NETWORK CONSISTING OF 100 OHM, 1/2 WATT RESISTOR IN SERIES WITH 0.25 MFD 1K V CAPACITOR CONNECTED ACROSS YELLOW AND BROWN WIRES. (FOR LMU5,46)														
6.	MOTOR GROUND LEAD (GREEN) TERMINAL MUST BE FASTENED TO MOUNTING CRADLE OF MOTOR UNDER A SEPARATE GROUND SCREW ONLY. A SCREW USED FOR ANOTHER PURPOSE CANNOT BE USED FOR GROUNDING (UNDERWRITERS LABORATORIES REQUIREMENT).														
7.	WIRE COLOR CODE: BK - BLACK BL - BLUE BR - BROWN P - PURPLE W - WHITE R - RED O - ORANGE Y - YELLOW S - SLATE G - GREEN														
8.	<table border="1"> <thead> <tr> <th>LMU</th><th>STARTING CAPACITOR VALUE</th></tr> </thead> <tbody> <tr> <td>3,15,21,30,33,36,37,38,42,46,49,51,52</td><td>43-48 MFD</td></tr> <tr> <td>11,12</td><td>170-226 MFD</td></tr> <tr> <td>35</td><td>64-77 MFD</td></tr> <tr> <td>55</td><td>15-18 MFD</td></tr> <tr> <td>19,20,24,26,31,45,56</td><td>88-108 MFD</td></tr> <tr> <td>50</td><td>161-193 MFD</td></tr> </tbody> </table>	LMU	STARTING CAPACITOR VALUE	3,15,21,30,33,36,37,38,42,46,49,51,52	43-48 MFD	11,12	170-226 MFD	35	64-77 MFD	55	15-18 MFD	19,20,24,26,31,45,56	88-108 MFD	50	161-193 MFD
LMU	STARTING CAPACITOR VALUE														
3,15,21,30,33,36,37,38,42,46,49,51,52	43-48 MFD														
11,12	170-226 MFD														
35	64-77 MFD														
55	15-18 MFD														
19,20,24,26,31,45,56	88-108 MFD														
50	161-193 MFD														



LMU 3,11,12,15,21,30,37,42,46,49
FOR USE WITH 115V.A.C. 60~POWER SUPPLY
LMU 33, 36,38, 51,52
FOR 115V.A.C. 50~POWER SUPPLY.
LMU 55
FOR 230V.A.C. 50~POWER SUPPLY



LMU 50,
FOR USE WITH 115V AC 50~POWER SUPPLY ONLY



LMU 19,20,24,26,31,45,56
FOR USE WITH 115V AC 60~POWER SUPPLY ONLY

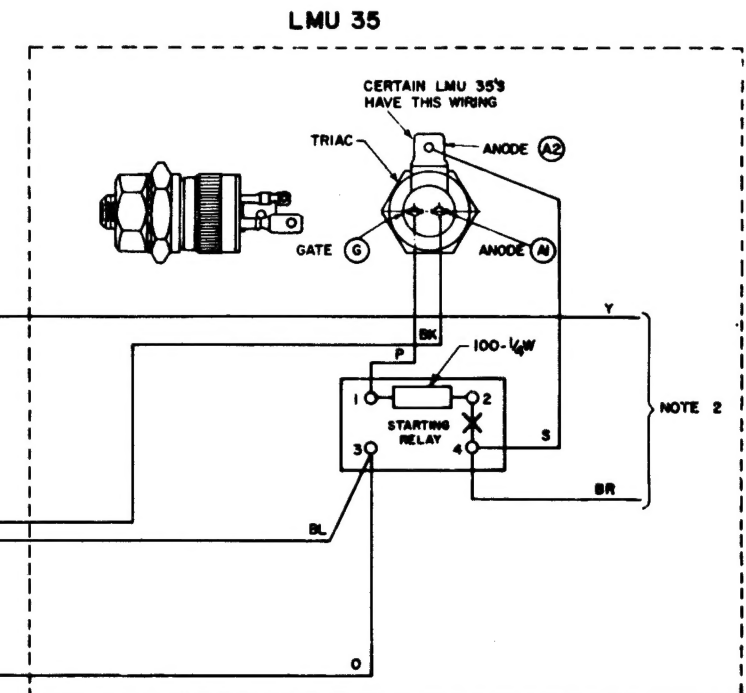
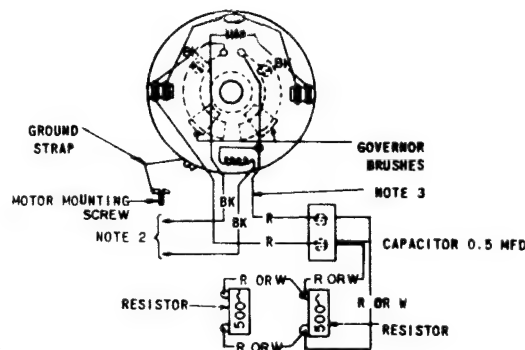


Figure 5-8. Model 28 Motor Units Wiring Diagram (Sheet 1 of 2)

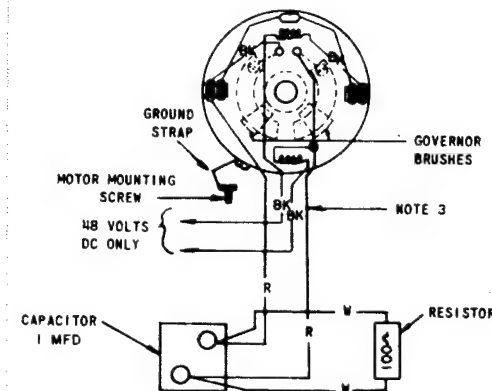
SERIES GOVERNED MOTOR UNITS

NAVELEX 0967-LP-616-7010

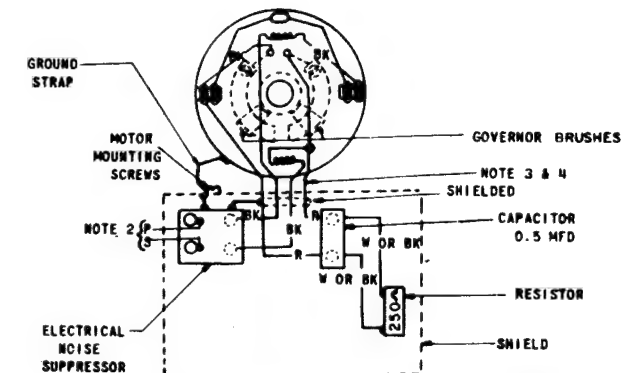
NO.	NOTES
1.	A. AC SERIES MOTOR UNITS OPERATE ON UN-REGULATED AC POWER. B. ASSOCIATED LESU MUST BE EQUIPPED WITH CAPACITOR-RESISTOR ASSEMBLY FOR DC OPERATION OF GOVERNED MOTORS.
2.	CONNECT EITHER WIRE TO DESIGNATED TERMINALS OF UNIT TERMINAL BLOCK, PER WIRING DIAGRAM OF ASSOCIATED UNIT.
3.	MOTOR LEADS OF SAME COLOR ARE INTER-CHANGEABLE.
4.	MOTOR LEADS ARE ENCLOSED IN APPROXIMATELY 10" LONG COPPER SHIELDING & FASTENED TO MOTOR AND CONTROL PARTS COMPARTMENT. (FOR LMU28).
5.	LMU4, 10, AND 14 MOTOR UNITS (UNIVERSAL SERIES GOVERNED) CONTAIN TWO 500 OHM RESISTORS WIRED IN PARALLEL EQUIVALENT TO 250 OHMS. LMU4 MOTOR UNIT SUPERSEDED BY LMU41 MOTOR UNIT. LMU10 MOTOR UNIT SUPERSEDED BY LMU47 MOTOR UNIT. LMU14 MOTOR UNIT SUPERSEDED BY LMU39 MOTOR UNIT.
6.	WIRE COLOR CODE: BK - BLACK BL - BLUE BR - BROWN P - PURPLE W - WHITE R - RED O - ORANGE Y - YELLOW S - SLATE G - GREEN



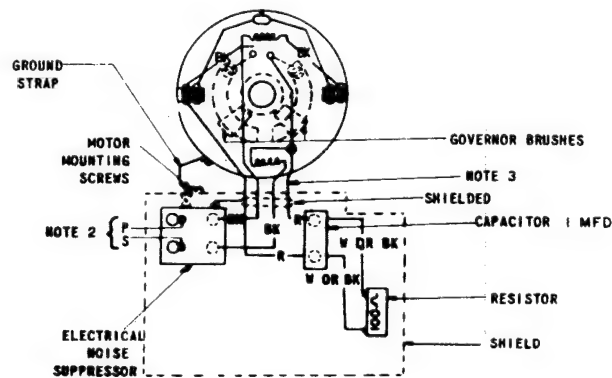
LMU 6, 13 (UNIVERSAL)
WITHOUT RADIO FREQUENCY SUPPRESSORS
FOR USE WITH EITHER 115V AC 50-60~OR 115V DC
POWER SUPPLY (NOTE 1B).



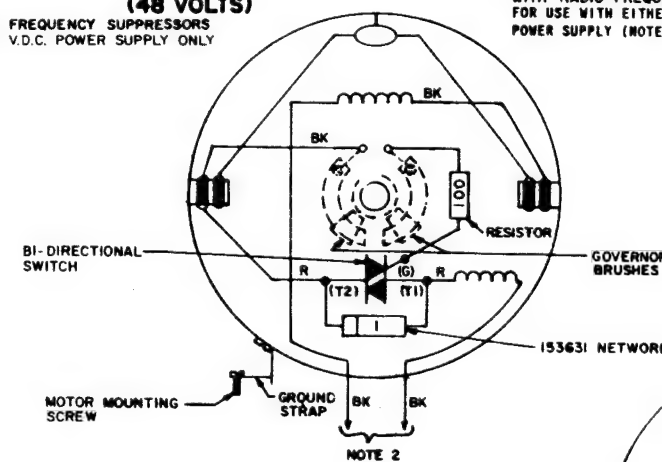
LMU 23 (48 VOLTS)
WITHOUT RADIO FREQUENCY SUPPRESSORS
FOR USE ON 48 V.D.C. POWER SUPPLY ONLY



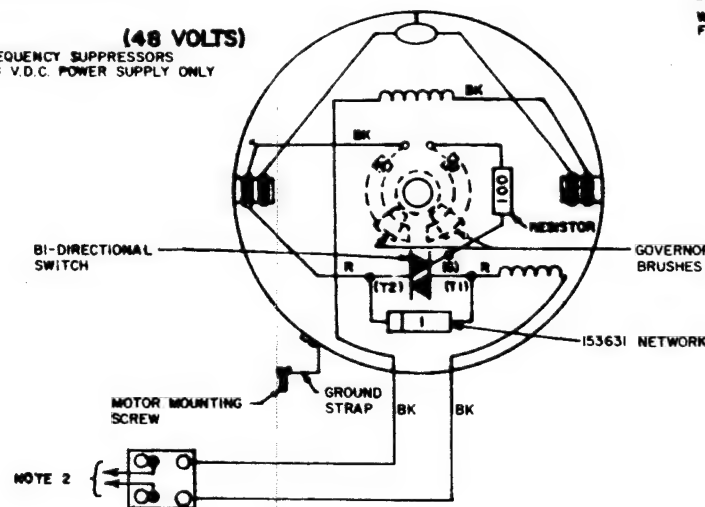
LMU 28, 32, 39, 41, 47 (UNIVERSAL)
WITH RADIO FREQUENCY SUPPRESSORS
FOR USE WITH EITHER 115V AC 50-60~115 V DC
POWER SUPPLY (NOTE 1B)



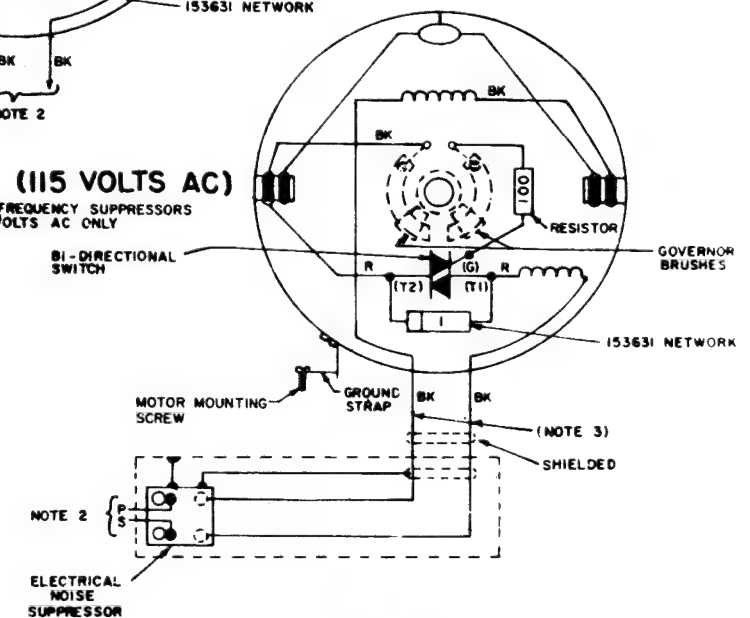
LMU 29 (48 VOLTS)
WITH RADIO FREQUENCY SUPPRESSORS
FOR USE ON 48 V.D.C. POWER SUPPLY ONLY



LMU 57, (115 VOLTS AC)
WITHOUT RADIO FREQUENCY SUPPRESSORS
FOR USE ON 115 VOLTS AC ONLY



LMU 60, 61, 64 (115 VOLTS AC)
WITH RADIO FREQUENCY SUPPRESSORS
FOR USE ON 115 VOLTS AC ONLY



LMU 63 (115 VOLTS A.C.)
WITH RADIO FREQUENCY SUPPRESSORS
FOR USE ON 115 VOLTS AC ONLY

Figure 5-8. Model 28 Motor Units Wiring Diagram
(Sheet 2 of 2)

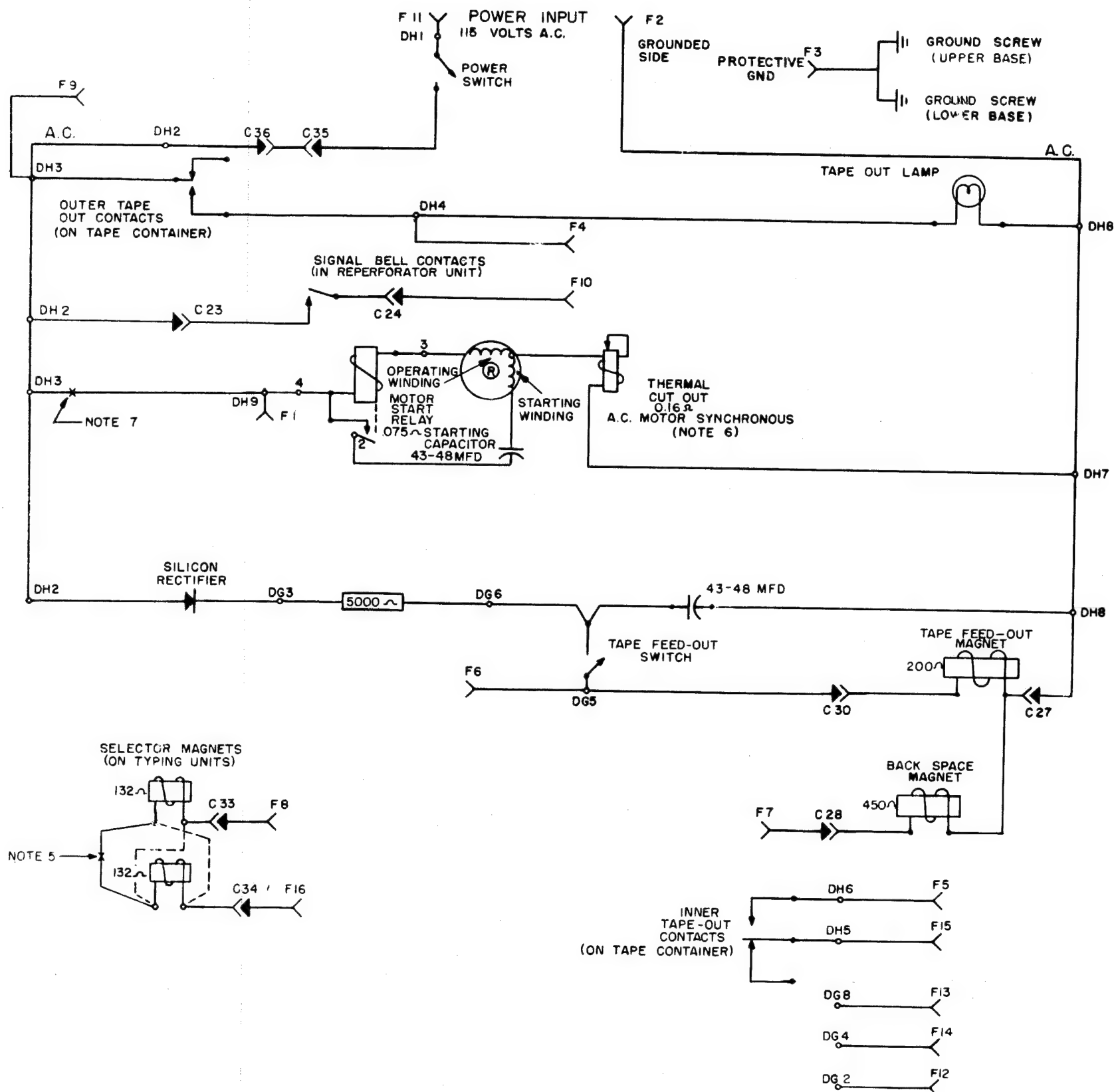


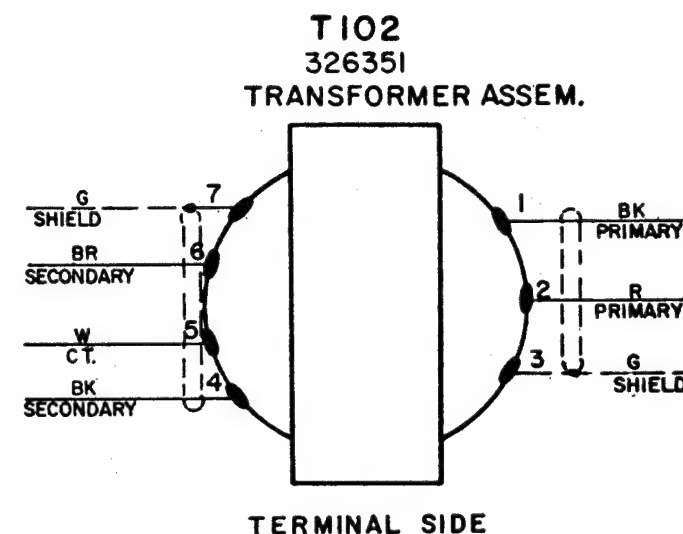
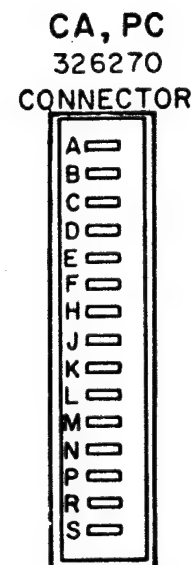
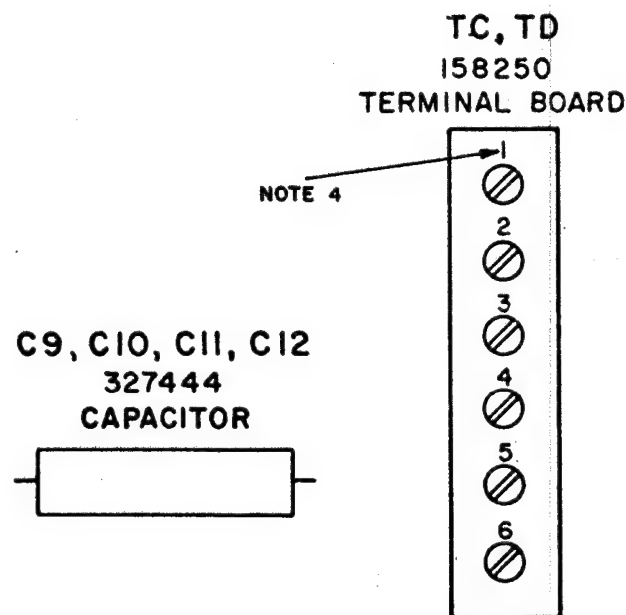


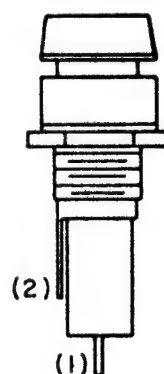
Figure 5-9. LRB8, 41, 49, and 57 Reperforator Base Wiring Diagram

NO.	NOTES
1.	ALL VOLTAGES DC UNLESS OTHERWISE SPECIFIED.
2.	TERMINAL DESIGNATION ENCLOSED IN PARENTHESIS ARE FOR REFERENCE AND ARE NOT MARKED ON COMPONENT.
3.	FUSE NUMBER-162360 8/10 AMP SLOW BLOWING
4.	TERMINAL NUMBERS APPEAR ON ASSOCIATED MARKING STRIP.
5.	* INDICATES TO TAPE END TERMINATING POINT.
6.	 INDICATES SINGLE SHIELDING
7.	 INDICATES DOUBLE SHIELDING
8.	ALL STRAPPING WIRE 24 AWG BARE, 39603RM. USE SLEEVING WHERE REQUIRED. ① INDICATES 18 AWG STRANDED WIRE. ② INDICATES 24 AWG STRANDED WIRE. ③ INDICATES 24 AWG 2 LEAD SINGLE SHIELDED CABLE. ALL SURFACE WIRE 24AWG GREEN, 31784 RM, UNLESS OTHERWISE SPECIFIED.
9.	REFER TO 8297WD FOR SCHEMATIC WIRING DIAGRAM
10.	COLOR CODE BK-BLACK G-GREEN BR-BROWN O-ORANGE BL-BLUE P-PURPLE R-RED Y-YELLOW S-SLATE W-WHITE
11.	OUTER SHIELD CONNECTED TO BOX AT CONNECTOR.



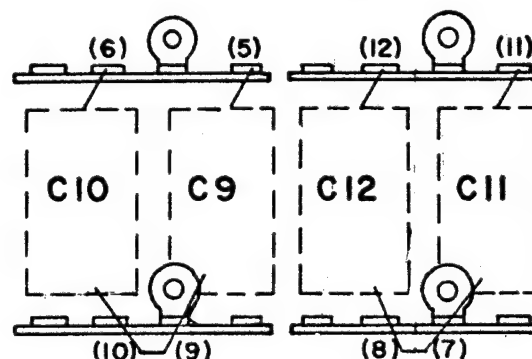
L1, L2
321133
CHOKE, FILTER

F102
116783
FUSE HOLDER

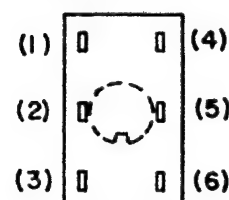


NOTE 3

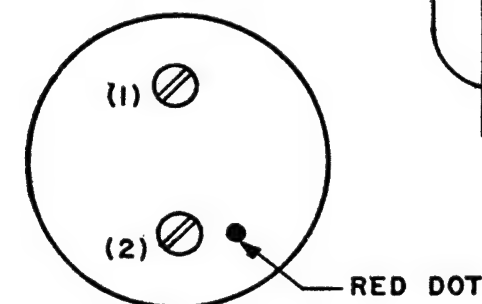
TS101
321207
TERMINAL STRIPS



S102
118659
SWITCH



C102
321129
CAPACITOR



R101
172726
RESISTOR

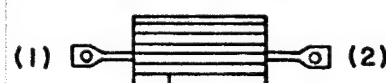
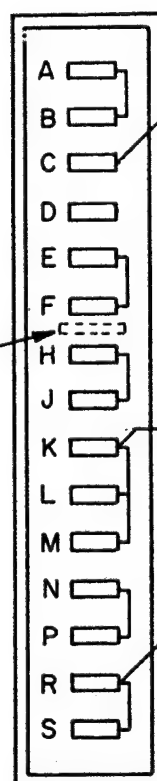


Figure 5-10. 321230 Electrical Service Assembly (Clutch) Wiring Diagram (Sheet 1 of 4)

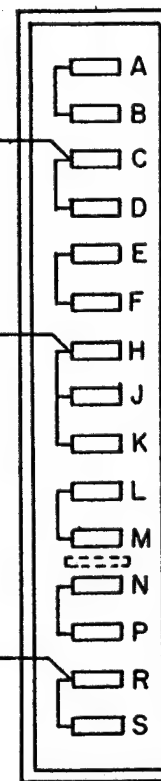
CA
326270
CONNECTOR

PC
326270
CONNECTOR

ADD POLARIZING KEY
TO CONNECTOR IN POSITIONS
INDICATED. (2-PLS)



(LK)
(CMD)



(POWER)
(SUPPLY)

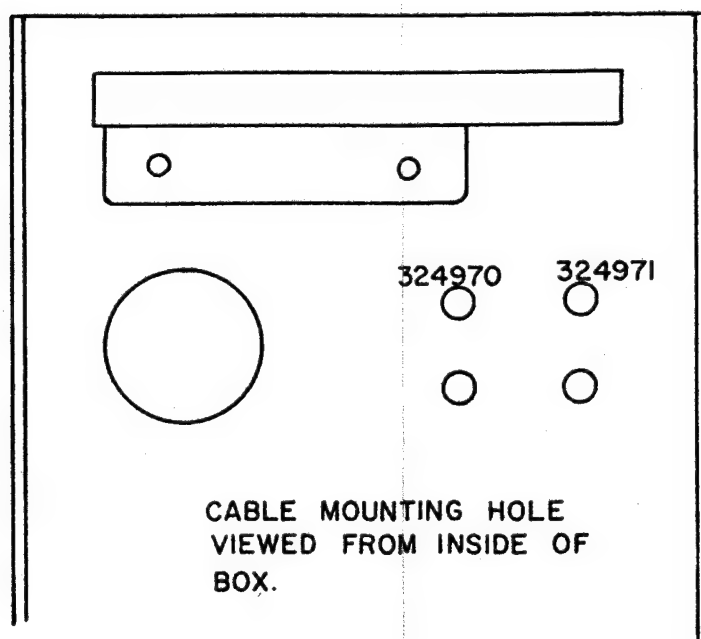
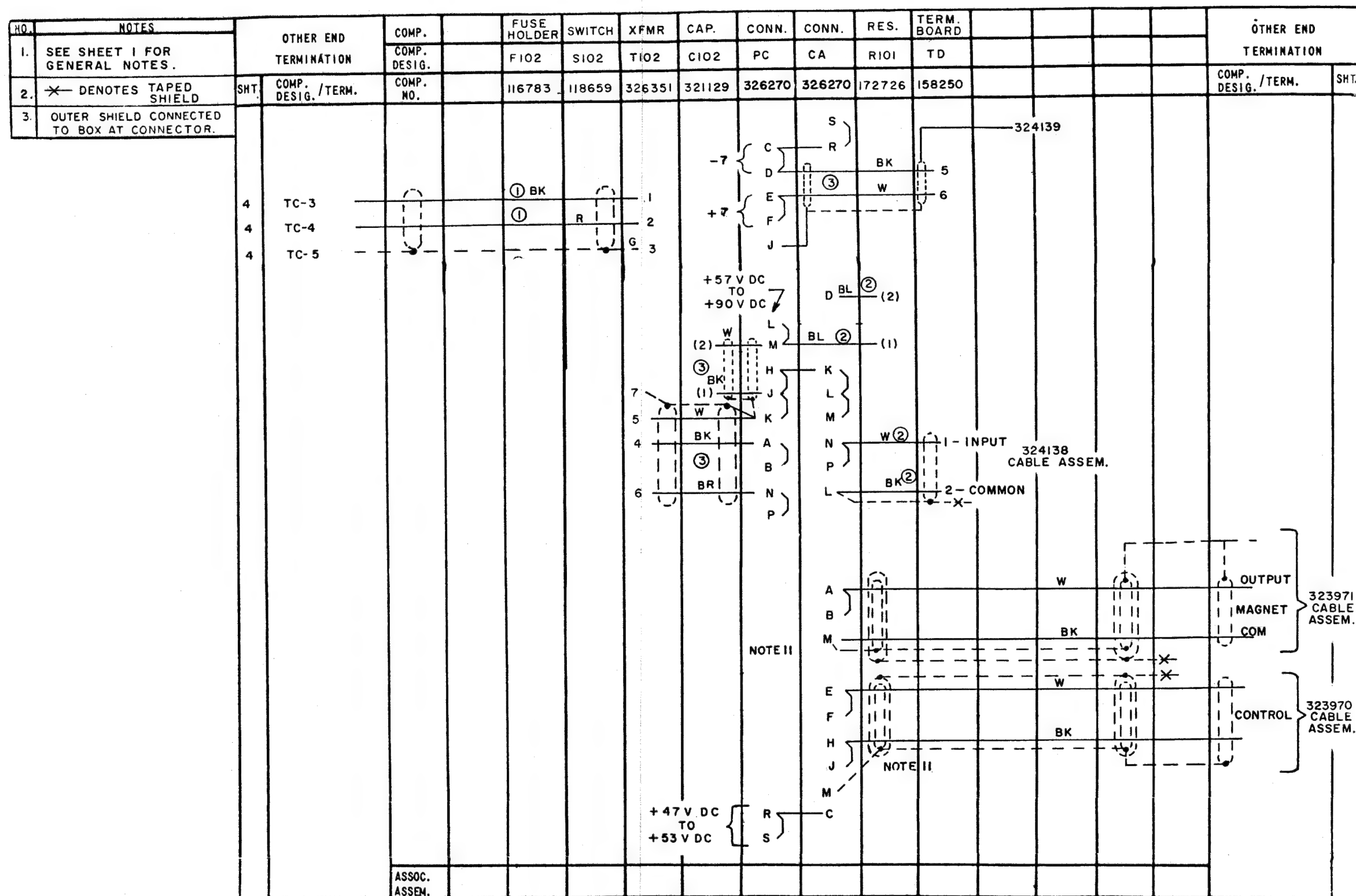


Figure 5-10. 321230 Electrical Service Assembly (Clutch)
Wiring Diagram (Sheet 2 of 4)



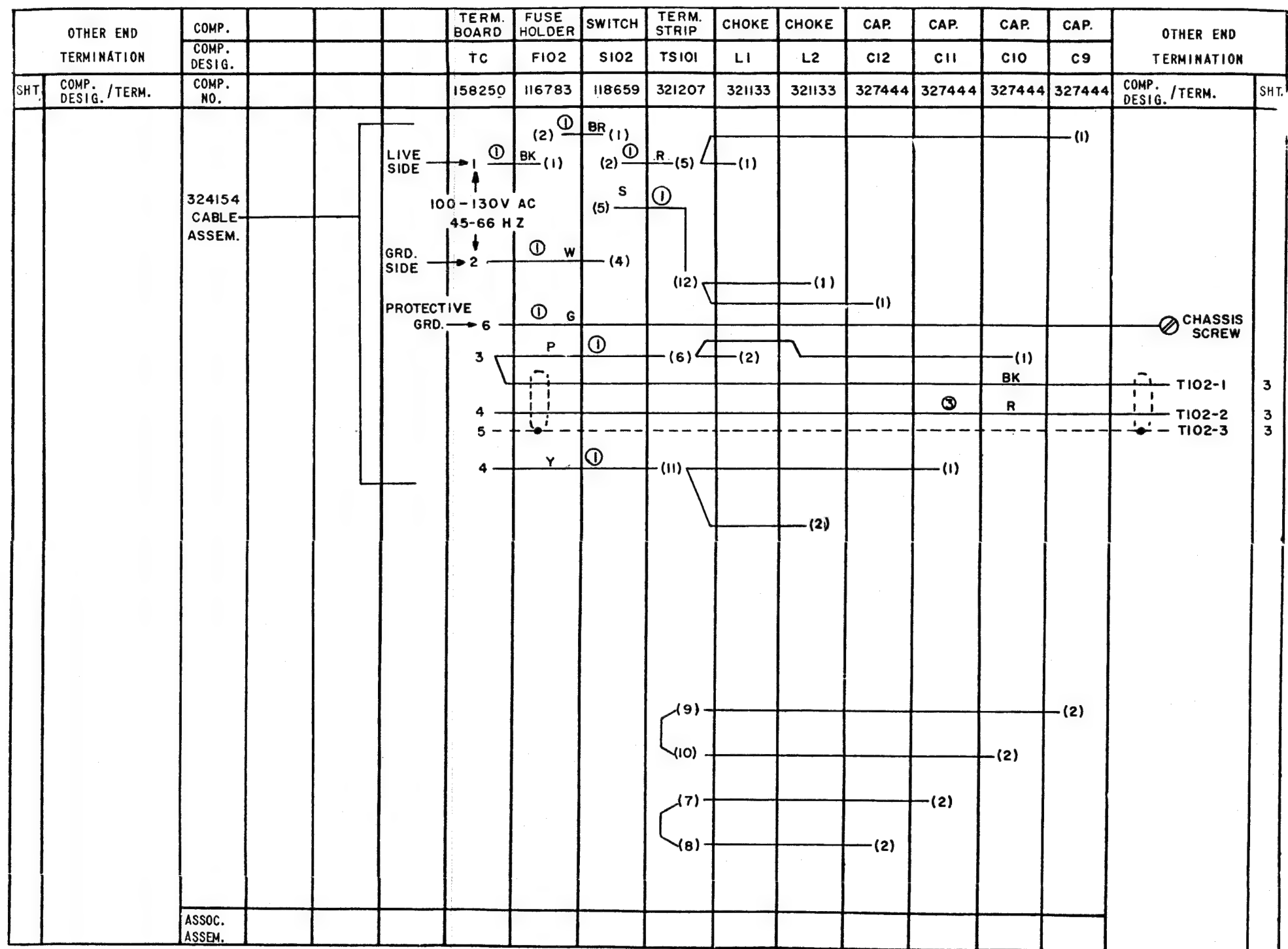


Figure 5-10. 321230 Electrical Service Assembly (Clutch)
Wiring Diagram (Sheet 4 of 4)

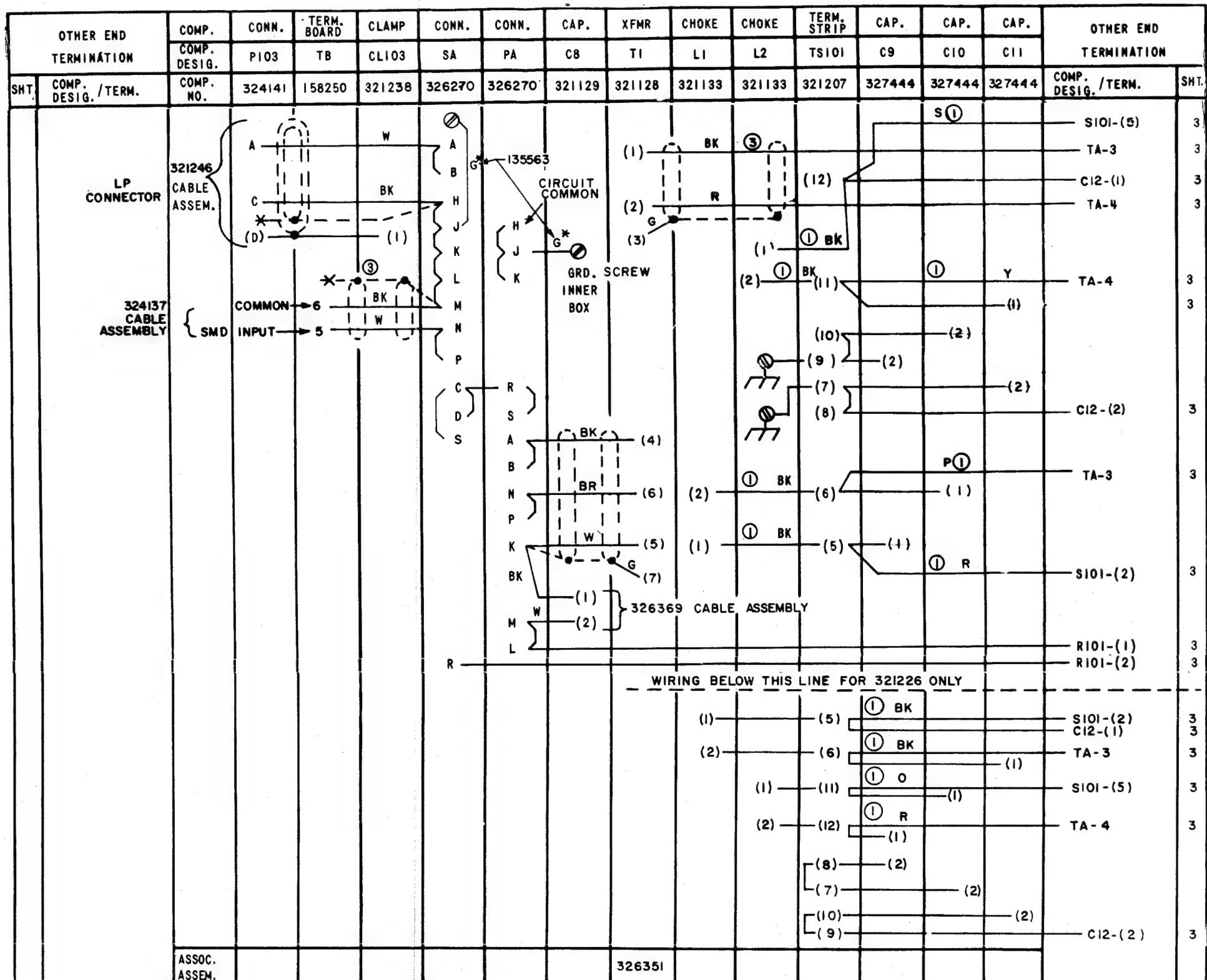


Figure 5-11. 321231 Electrical Service Assemblies Wiring Diagram (Sheet 2 of 3)

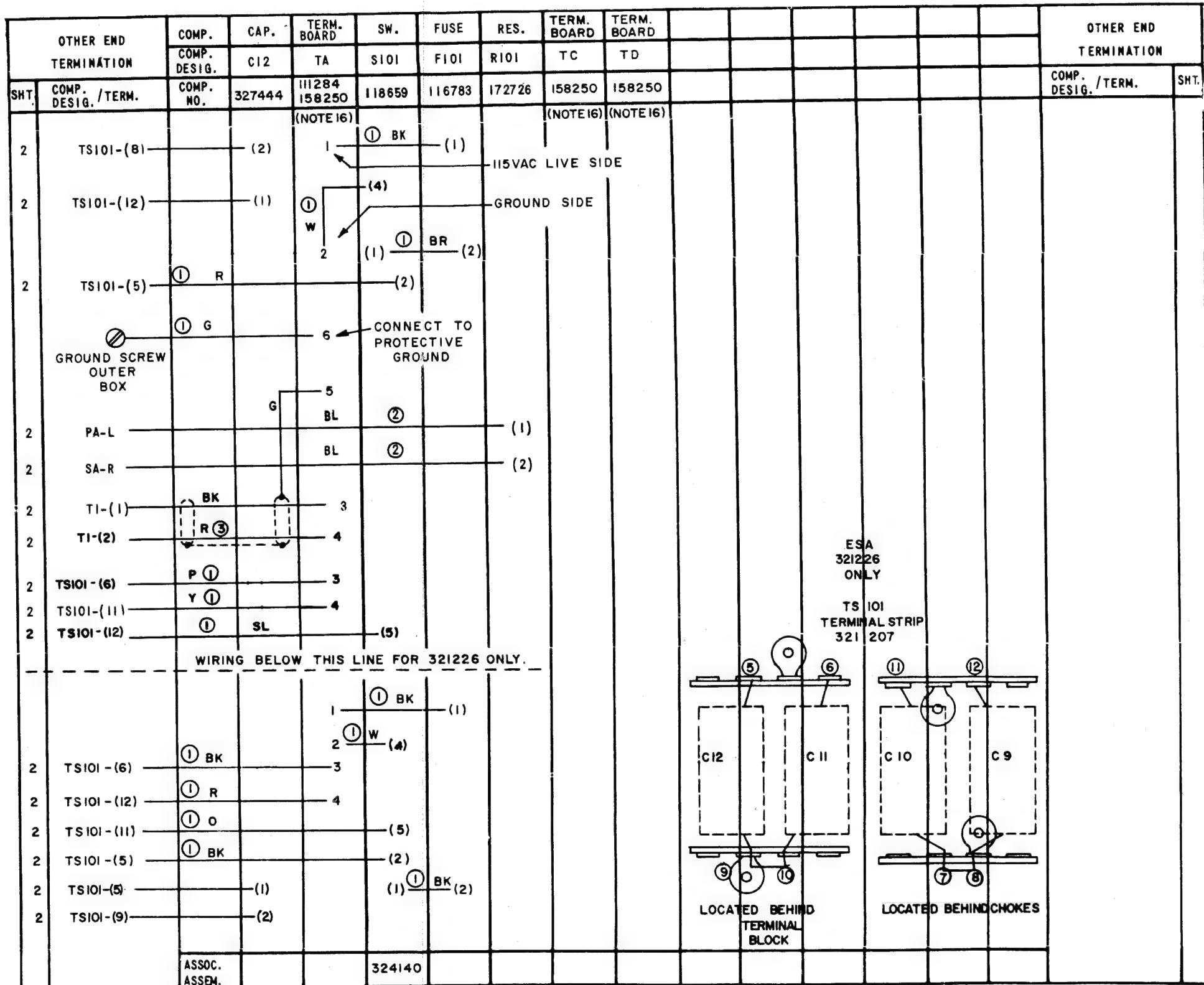
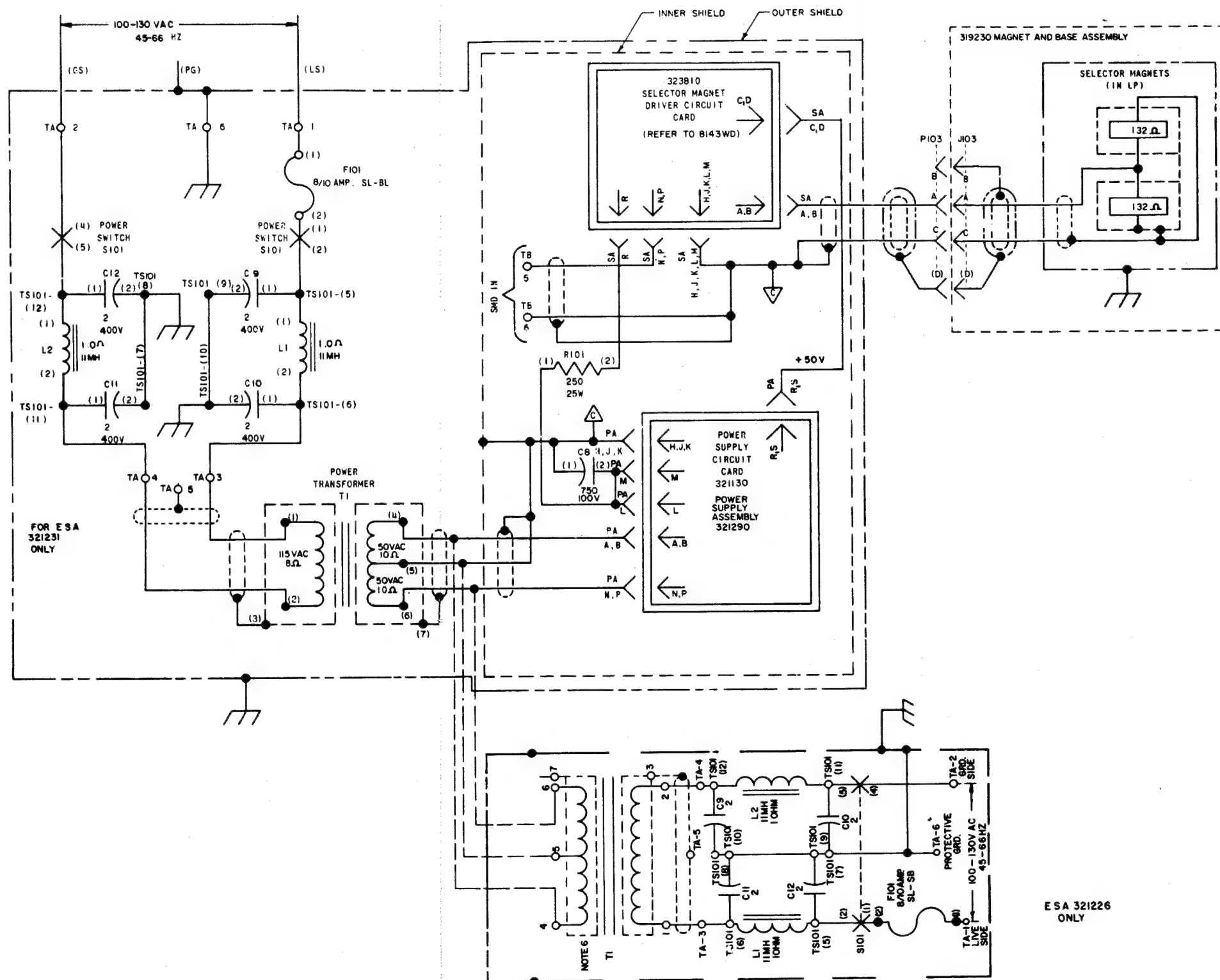


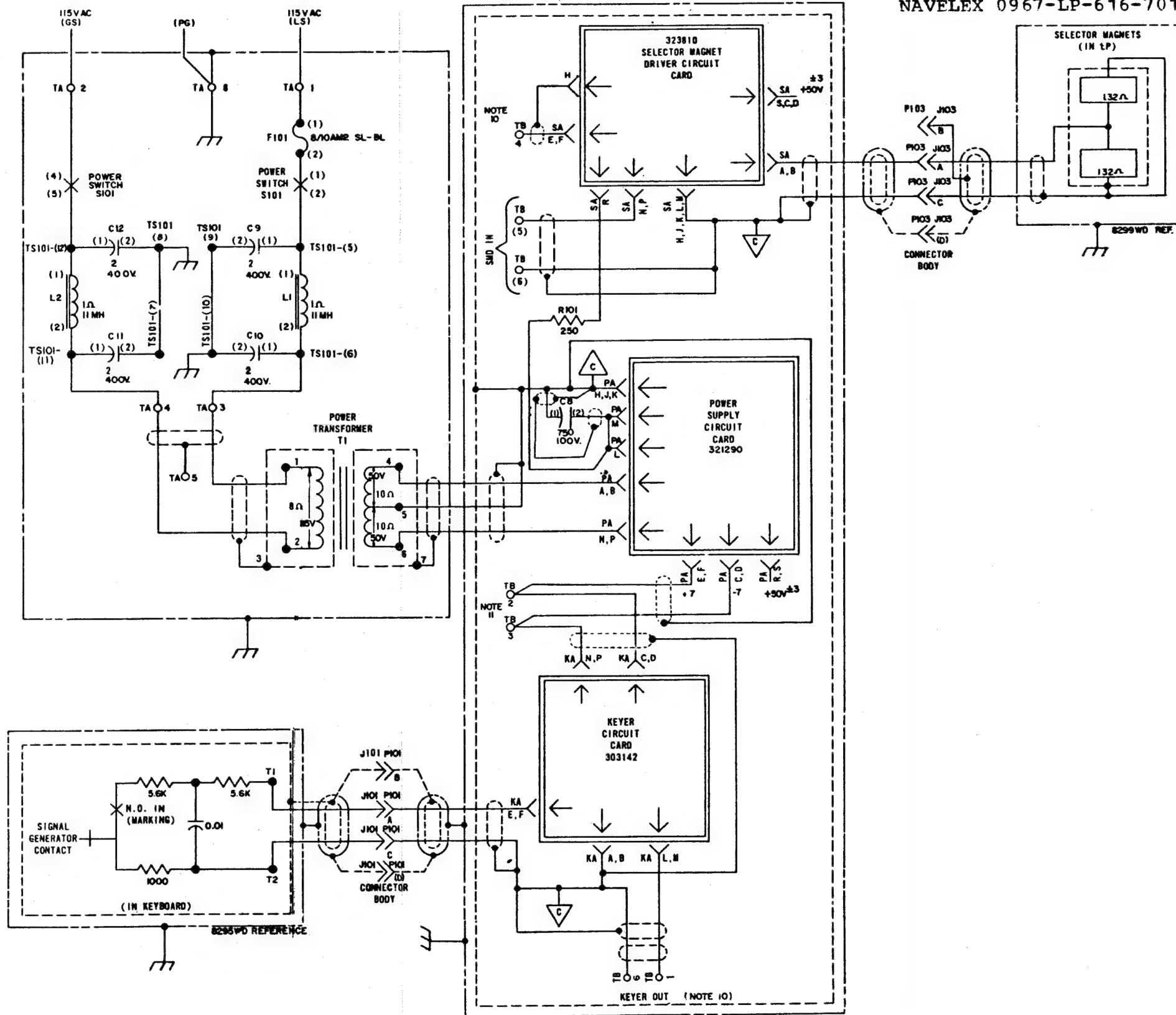
Figure 5-11. 321231 Electrical Service Assemblies Wiring Diagram (Sheet 3 of 3)

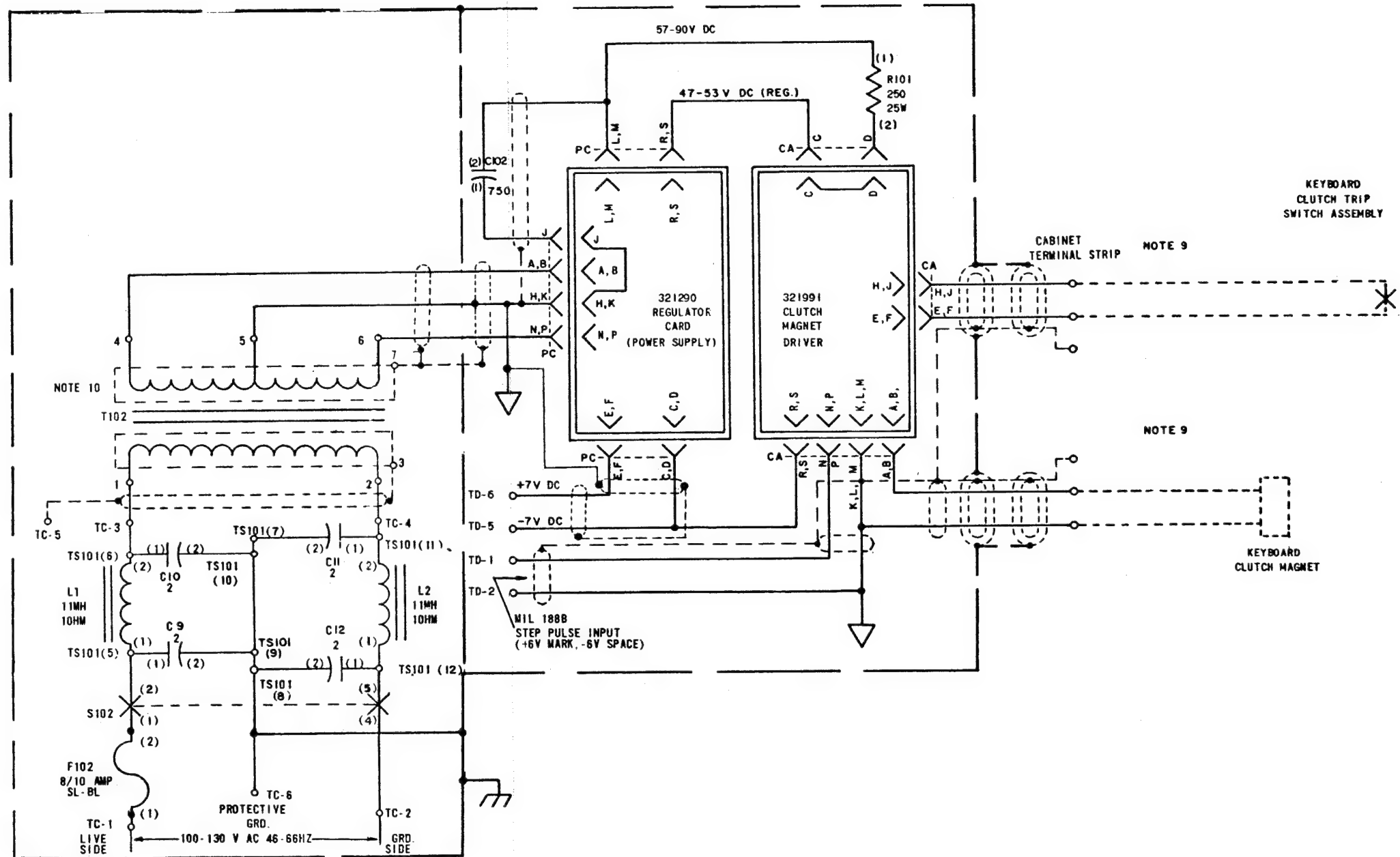







**ESA 321226
ONLY**

NO.	NOTES
1.	INDICATES OUTER SHIELD AND INDICATES INNER SHIELD
2.	CAPACITANCE VALUES IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
3.	INDICATES FEMALE AND INDICATES MALE TERMINALS ON CONNECTORS
4.	SL-BL INDICATES SLOW-BLOWING.
5.	INDICATES SHIELDED WIRE.
6.	ALL VOLTAGES DC, UNLESS OTHERWISE SPECIFIED.
7.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESES ARE FOR REFERENCE AND ARE NOT MARKED ON COMPONENT.
8.	WIRING DIAGRAM - 8298WD
9.	RESISTANCE VALUES IN OHMS UNLESS OTHERWISE SPECIFIED.
10.	FOR LOCAL COPY FROM KEYS, STRAP TB4 TO TB1.
11.	WHEN IT IS DESIRED TO PROVIDE AN EXTERNAL +6V AND -6V REMOVE THE +6V AND -6V LEADS FROM TB2 AND TB3. CONNECT COMMON OF EXTERNAL SUPPLY TO TB6.
12.	SELECTOR MAGNETS 8299WD SIGNAL GENERATOR 8295WD
13.	REFERENCE SPEC. FOR TELETYPE CORPORATION EMPLOYEES ONLY 61267S

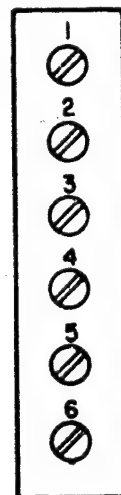




5-71/5-72 blank

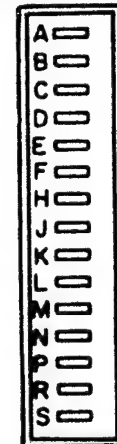
NO.	NOTES										
1.	ALL VOLTAGES DC UNLESS OTHERWISE SPECIFIED.										
2.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESIS ARE FOR REFERENCE AND ARE NOT MARKED ON COMPONENT.										
3.	<p>ALL SURFACE WIRE 24AWG GREEN, 31784RM, UNLESS OTHERWISE SPECIFIED. ALL STRAPPING WIRE 24 AWG BARE, 39603RM. USE SLEEVING WHERE REQUIRED.</p> <p>① INDICATES 18 AWG STRANDED WIRE.</p> <p>② INDICATES 24 AWG STRANDED WIRE.</p> <p>③ INDICATES 24AWG 2 LEAD SINGLE SHIELDED CABLE.</p> <p>④ INDICATES 24AWG SINGLE SHIELDED WIRE.</p>										
4.	* INDICATES TO TAPE END TERMINATING POINT.										
5.	<p> INDICATES SINGLE SHIELDING</p> <p> INDICATES DOUBLE SHIELDING</p>										
6.	FUSE NUMBER: 162360 8/10 AMP SLOW BLOWING.										
7.	ASSOCIATED CABLE ASSEMBLIES, 321246, 321248, 324154, 324136, 324137.										
8.	TERMINALS 7&10 ARE GROUNDED THRU THE MOUNTING SCREW OF THE TERMINAL STRAPS.										
9.											
10.	 INNER SHIELD GROUND NUT ON CONNECTOR MOUNTING.										
11.	<p>COLOR CODE:</p> <table border="0"> <tr> <td>BK-BLACK</td> <td>R-RED</td> </tr> <tr> <td>BL-BLUE</td> <td>O-ORANGE</td> </tr> <tr> <td>BR-BROWN</td> <td>W-WHITE</td> </tr> <tr> <td>S-SLATE</td> <td>G-GREEN</td> </tr> <tr> <td>Y-YELLOW</td> <td>P-PURPLE</td> </tr> </table>	BK-BLACK	R-RED	BL-BLUE	O-ORANGE	BR-BROWN	W-WHITE	S-SLATE	G-GREEN	Y-YELLOW	P-PURPLE
BK-BLACK	R-RED										
BL-BLUE	O-ORANGE										
BR-BROWN	W-WHITE										
S-SLATE	G-GREEN										
Y-YELLOW	P-PURPLE										
12.	ASSOCIATED WD 8296WD SCHEMATIC DIAGRAM.										
	SEE SHEET 2 FOR OTHER NOTE										

TA,TB
158250
TERMINAL BOARD



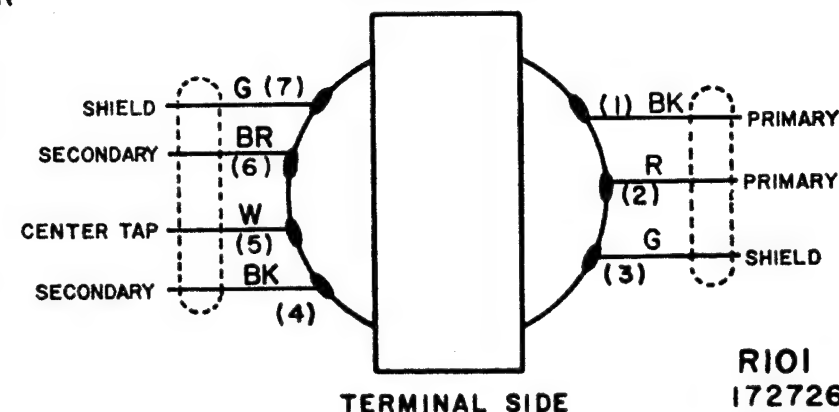
NOTE 13

KA,PA,SA
326270
CONNECTOR



NOTE 14

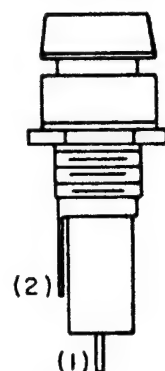
TI NAVELEX 0967-LP-616-7010
326351
TRANSFORMER



RI01
172726
RESISTOR

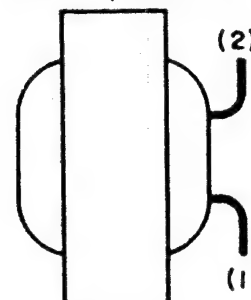


FI01
116783
FUSE HOLDER

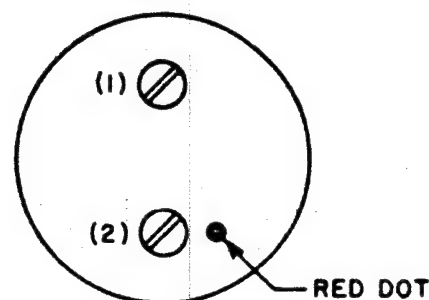


NOTE 6

L1,L2
321133
CHOKE, FILTER

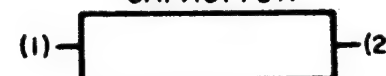


C8
321129
CAPACITOR

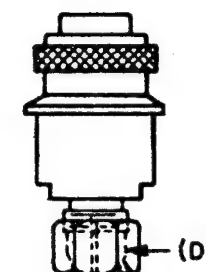
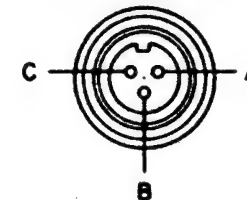


RED DOT

C9,C10,C11,C12
327444
CAPACITOR

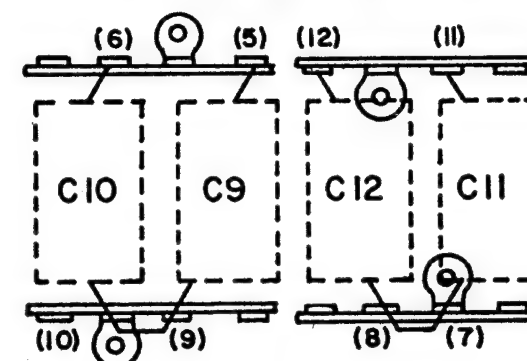


PI01,PI03
324141
CONNECTOR

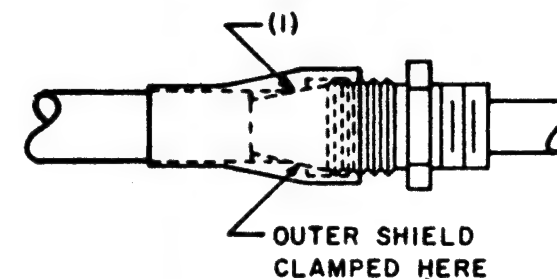


OUTER SHIELD
CLAMP

TS101
321207
TERMINAL STRIPS



CL101,CL103
321276,321238
CLAMP



OUTER SHIELD
CLAMPED HERE

Figure 5-16. 323813 Electrical Service Assembly Wiring Diagram (Sheet 1 of 3)

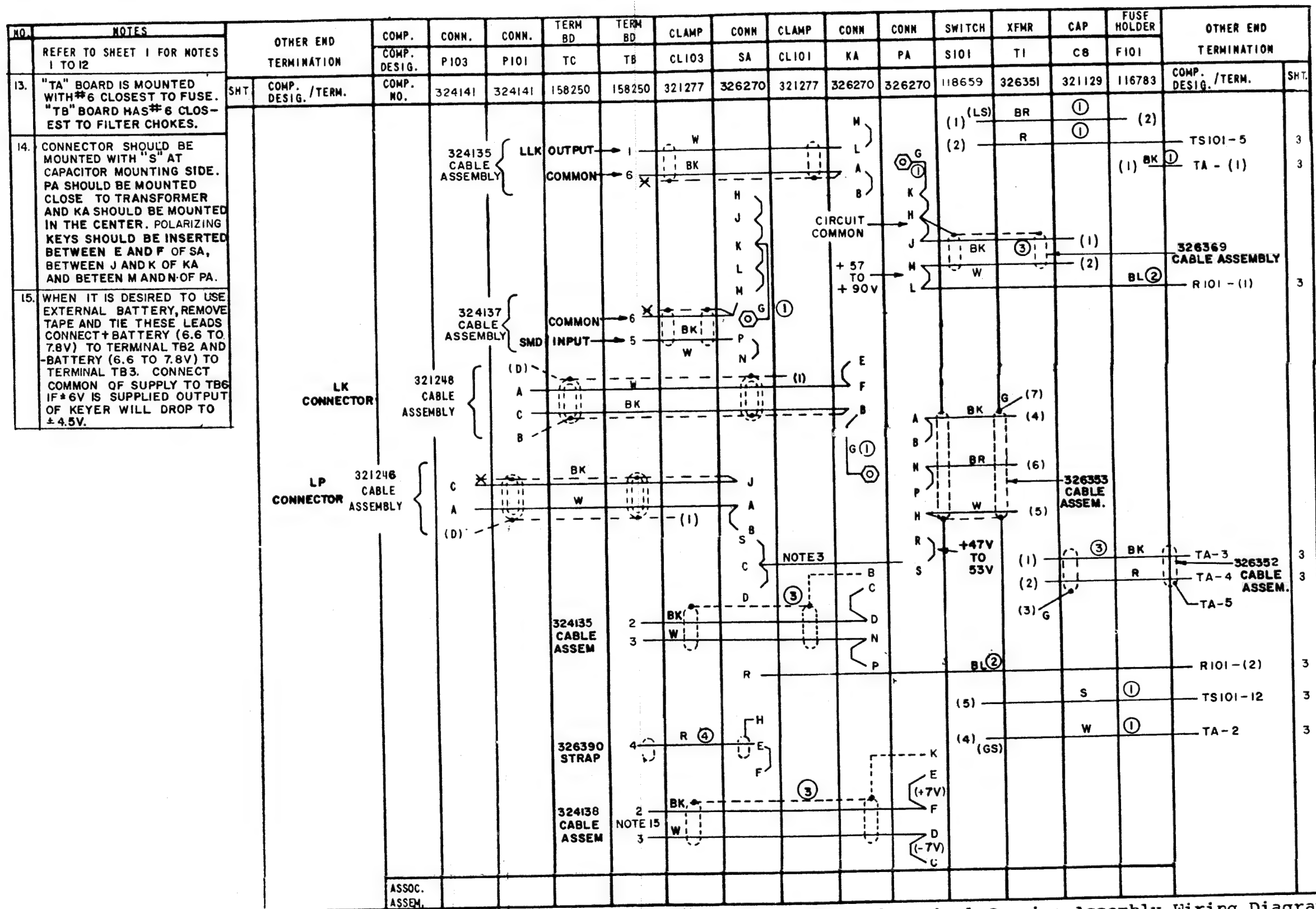


Figure 5-16. 323813 Electrical Service Assembly Wiring Diagram (Sheet 2 of 3)

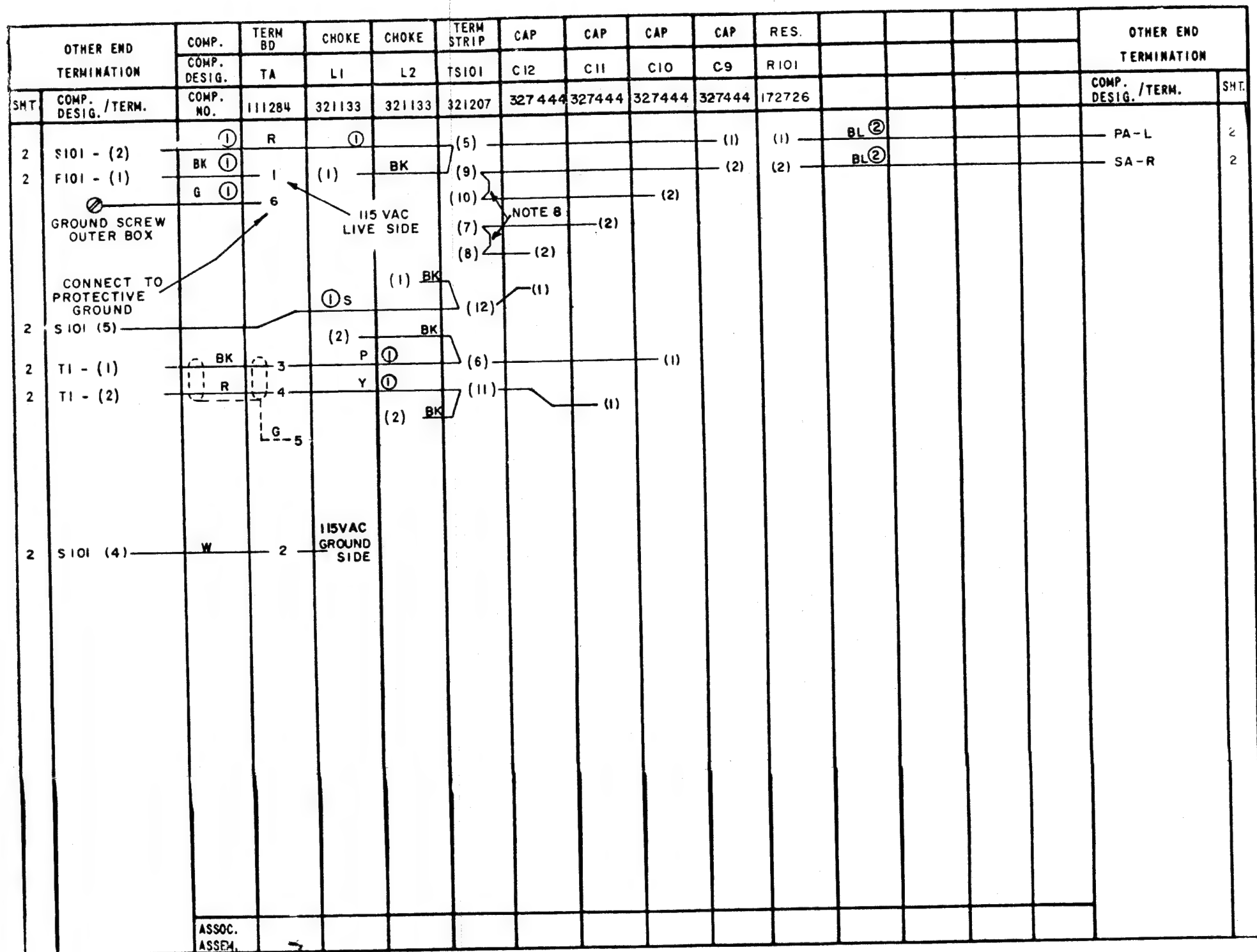


Figure 5-16. 323813 Electrical Service Assembly Wiring Diagram
(Sheet 3 of 3)

NO.	NOTES
1	CONNECTOR VIEWED FROM SOLDER TERMINAL END.
2	SELECTOR MAGNETS ARE WIRED FOR .060 AMPERE OPERATION OR USE WITH 323810 SELECTOR MAGNET DRIVER.
3	COLOR CODE R- RED W- WHITE BK- BLACK
4	REFERENCE SPEC. FOR TELETYPE CORPORATION EMPLOYEES ONLY 61213S
5	LEGEND: DR-DRAIN CL-CLEAR INSULATION
6	REFER TO APPROPRIATE SET SCHEMATIC WIRING DIAGRAM FOR J CONNECTOR NUMBER.

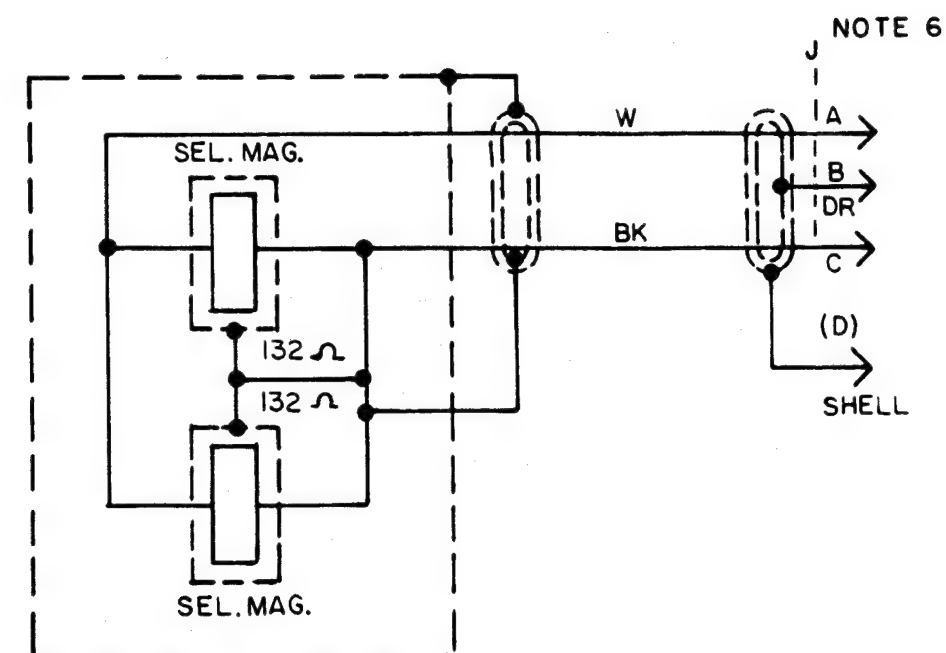
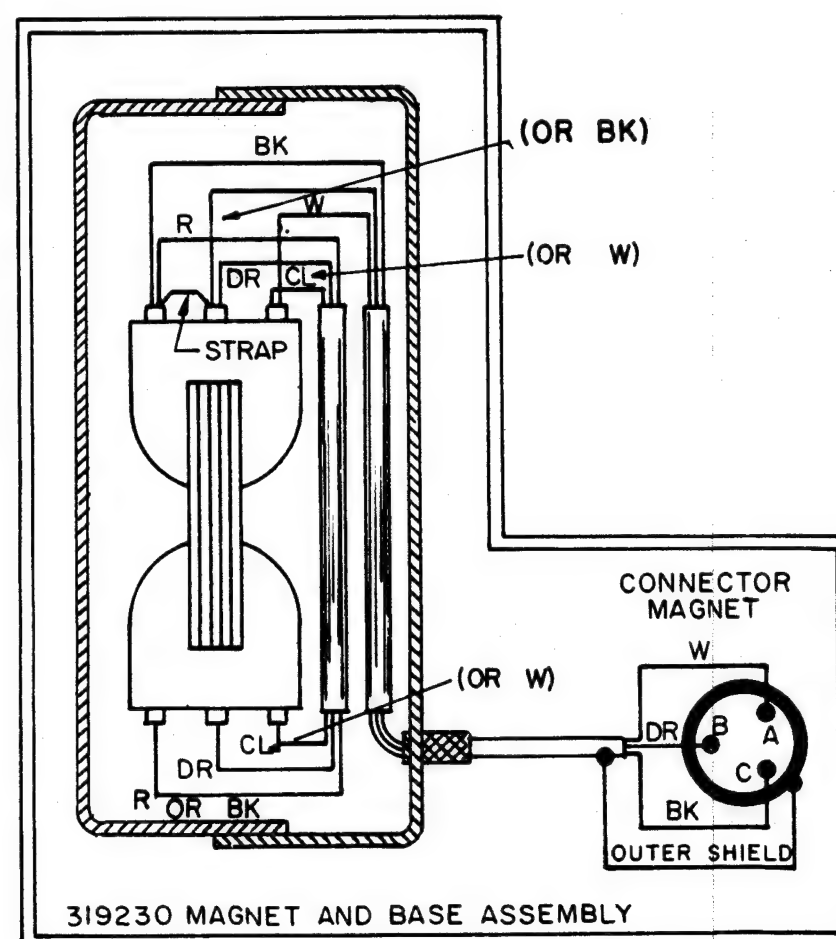

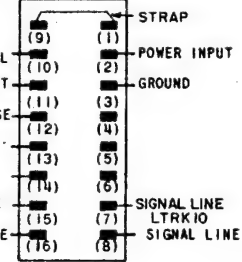


Figure 5-17. 319204 Selector Assembly Schematic Diagram and Wiring Diagram

NO.	NOTES
1.	WIRING LEGEND:  DISTANT TERMINATING AREA DISTANT TERMINAL DESIGNATION A-1-W-BL WIRE COLOR CODE
2.	COLOR CODE: BK - BLACK G - GREEN BL - BLUE Y - YELLOW BR - BROWN W - WHITE R - RED S - SLATE P - PURPLE O - ORANGE
3.	UNIT WIRED FOR 115V AC INPUT.
4.	CONNECTORS VIEWED FROM SOLDER TERMINAL ENDS.
5.	NUMBERS IN PARENTHESIS ARE FOR REFERENCE AND ARE NOT NECESSARILY SHOWN ON COMPONENTS.
6.	WHEN SOLDERING CABLE TO INDICATOR LIGHTS, BEND TERMINALS OUTWARD 90°
7.	THESE SPARES ARE PART OF THE 161878 CABLE AND ARE TIED BACK AT THE F CONNECTOR.
8.	GROUND STRAP TO LEFT FRONT MTG. STUD ON BASE.
9.	
10.	UNITS INCLUDE MATING 16 PT. CONNECTOR FOR CUSTOMER USE. CIRCUIT REFERENCES SHOWN BELOW. FOR CIRCUITRY, REFER TO SET SCHEMATIC.
	MATING CONNECTOR (159541)  FOR SIGNAL BELL (9) STRAP POWER INPUT (10) POWER INPUT GROUND (2) GROUND CUSTOMER USE (11) CUSTOMER USE CUSTOMER USE (12) MOTOR CONT. RELAY CUSTOMER USE (13) CUSTOMER USE SIGNAL LINE LTRK IO (14) SIGNAL LINE LTRK IO SIGNAL LINE (15) SIGNAL LINE SIGNAL LINE (16) SIGNAL LINE
	TERMINAL NO. 3 TO BE CONNECTED TO A GROUND SCREW ON THE BASE.
11.	WIRING ON UNITS WITHOUT "V" FUSE HOLDER.
12.	WIRING ON UNITS WITH "V" FUSE HOLDER.
13.	FOR LTRK-1 WITH 179615 MOD. KIT. SEE 7220WD.
14.	FOR ASSOCIATED SCHEMATICS REFER TO: 3575WD LTRK1 4147WD LTRK2 7221WD LTRK1 WITH 179615 MOD. KIT. 8442WD LTRK IO
15.	REFERENCE SPEC. FOR TELETYPE CORP. EMPLOYEES ONLY: 6759S.
16.	TOGGLE STRAP PRESENT ON LTRK IO ONLY.
17.	ARC SUPPRESSOR NOT PRESENT ON LTRK IO.
18.	WIRE LTRK IO AS FOLLOWS: (1) REMOVE METAL STRAP BETWEEN B4 AND B5. (2) CONNECT W-R SPARE IN CONNECTOR F TO F7. CONNECT BL SPARE IN CONNECTOR F TO F15

19.	IF LTRK IO SIGNAL GENERATOR IS USED IN STANDARD 20 OR 60 MA DC LINE, IT SHOULD NOT BE TRANSFERRED TO LOW VOLTAGE SERVICE WITHOUT REPLACING SIGNAL GENERATING CONTACTS.
20.	160307 WAS REPLACED FOR STANDARDIZATION.

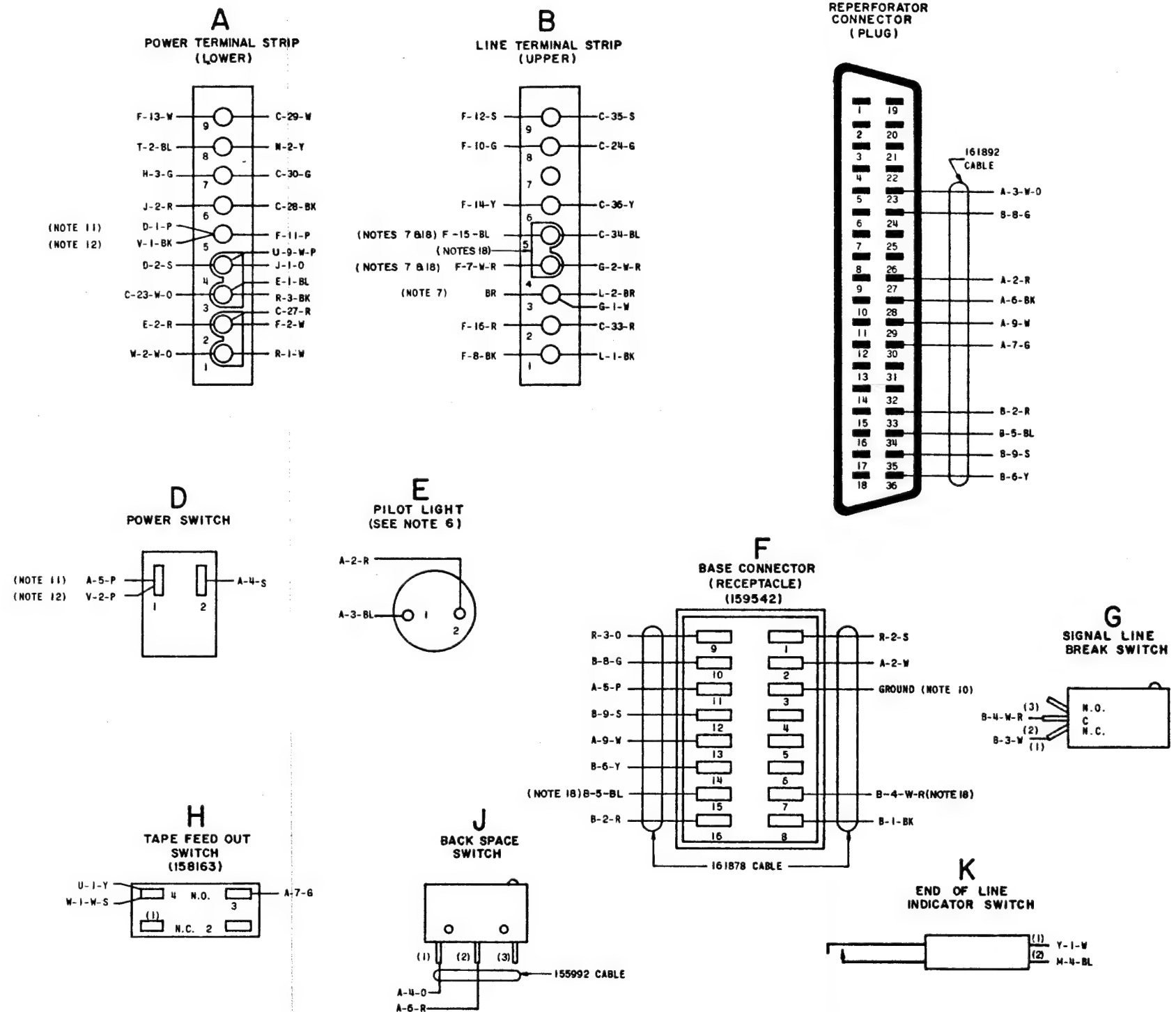
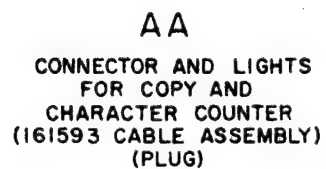
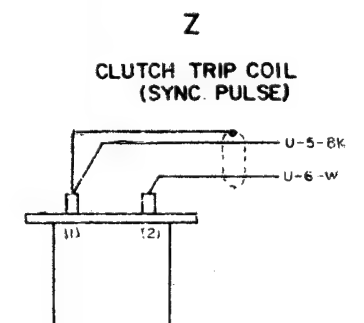
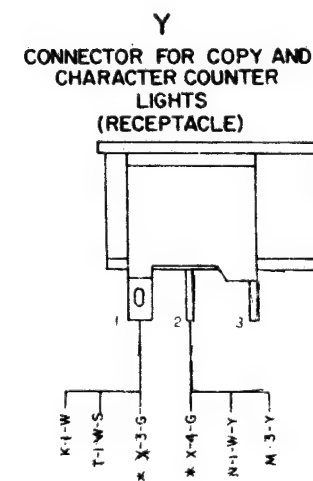
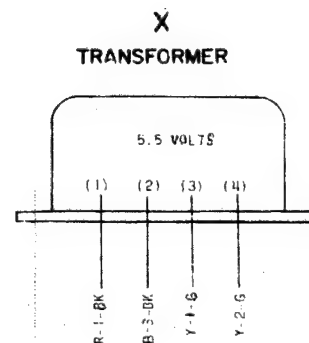
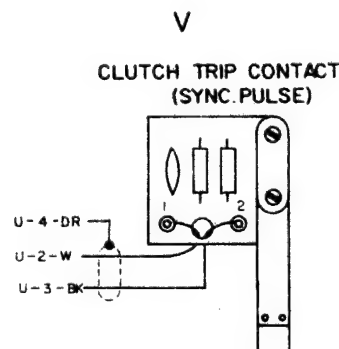
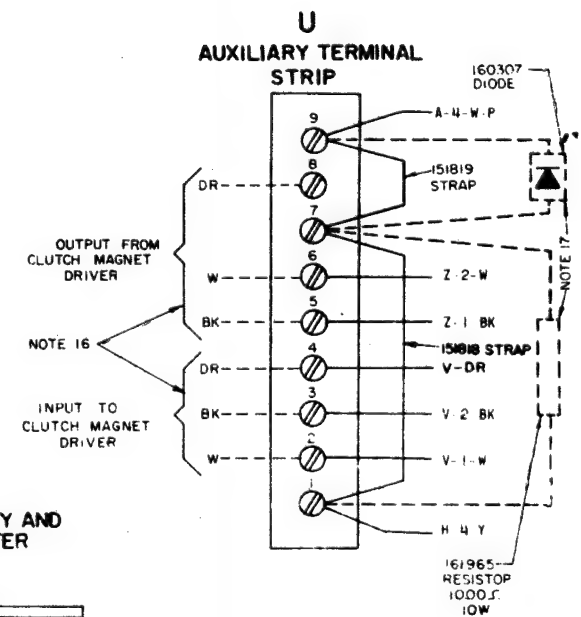
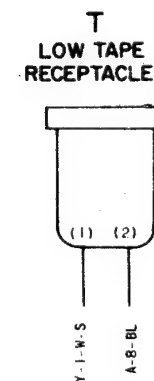
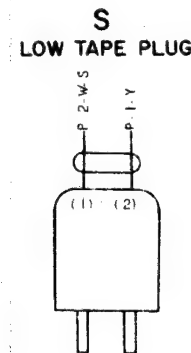
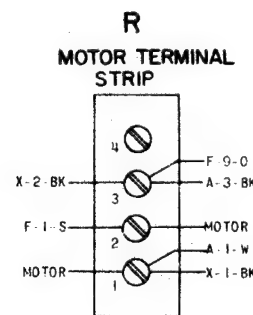
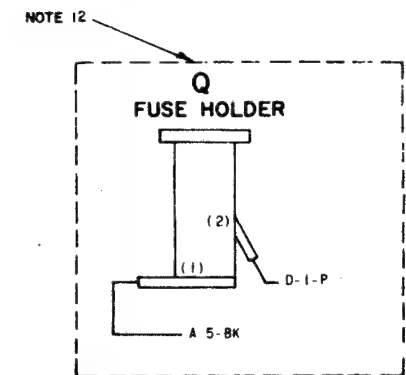
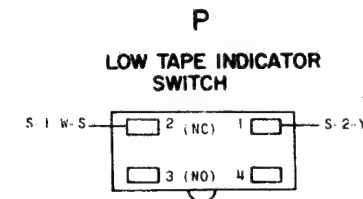
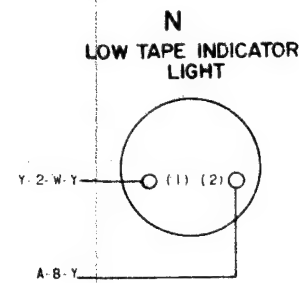
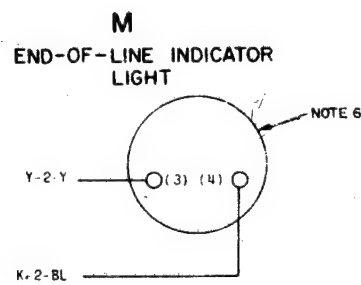


Figure 5-18. Send-Receive Typing Reperforator Keyboard Used with 323802 Modification Kit, Wiring Diagram (Sheet 1 of 2)



NOTE

Figure 5-18. Send-Receive Typing Reperforator Keyboard Used with 323802 Modification Kit, Wiring Diagram (Sheet 2 of 2)

NO	NOTES										
1	<p>WIRING LEGEND.</p> <p>— DISTANT TERMINATING AREA</p> <p>— DISTANT TERMINATING DESIGNATION</p> <p>F-4-W-BL — WIRE COLOR CODE</p>										
2.	<p>COLOR CODE</p> <table border="0"> <tr> <td>BK - BLACK</td><td>G - GREEN</td></tr> <tr> <td>BR - BROWN</td><td>BL - BLUE</td></tr> <tr> <td>R - RED</td><td>P - PURPLE</td></tr> <tr> <td>O - ORANGE</td><td>S - SLATE</td></tr> <tr> <td>W - WHITE</td><td>Y - YELLOW</td></tr> </table>	BK - BLACK	G - GREEN	BR - BROWN	BL - BLUE	R - RED	P - PURPLE	O - ORANGE	S - SLATE	W - WHITE	Y - YELLOW
BK - BLACK	G - GREEN										
BR - BROWN	BL - BLUE										
R - RED	P - PURPLE										
O - ORANGE	S - SLATE										
W - WHITE	Y - YELLOW										
3.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESES ARE FOR REFERENCE AND ARE NOT MARKED ON COMPONENTS.										
4.	TERMINALS ON CONNECTOR SHOWN AS VIEWED FROM SOLDER END										
5.	NORMALLY OPEN (NO) AND NORMALLY CLOSED (NC) CONTACTS ARE SHOWN WHEN THE REPERFORATOR IS IN THE STOP (IDLE) POSITION.										
6.	GENERAL NOTE: WIRING OF INDIVIDUAL COMPONENTS IS DETERMINED BY REFERRING TO THE CABLE ASSEMBLIES SPECIFIED ON THE UNIT B/M.										
7.											
8.	FOR WIRING OF BACKSPACE MAGNET ON LAK KEYBOARD MOUNTED PERFORATORS REFER TO ASSOCIATED LAK WIRING DIAGRAM.										
9	ASSOCIATED SCHEMATIC DIAGRAMS 8443WD.										

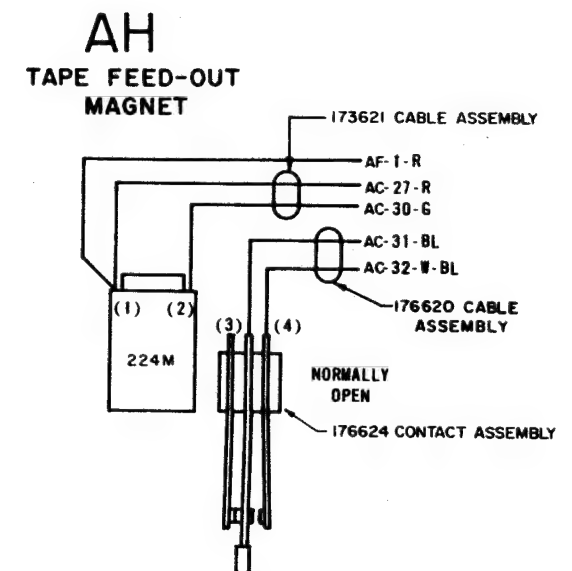
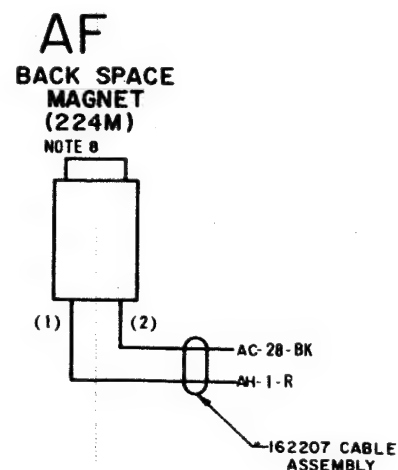
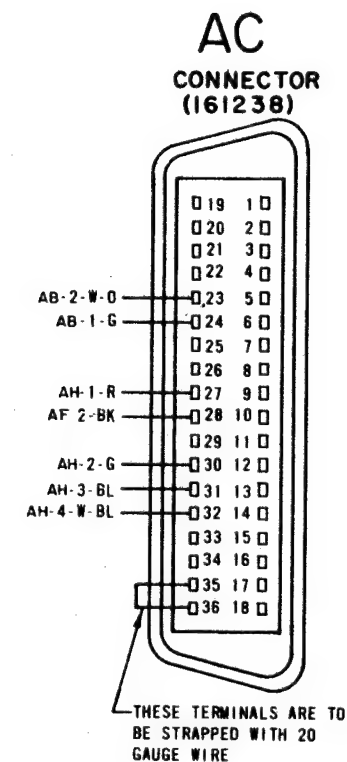
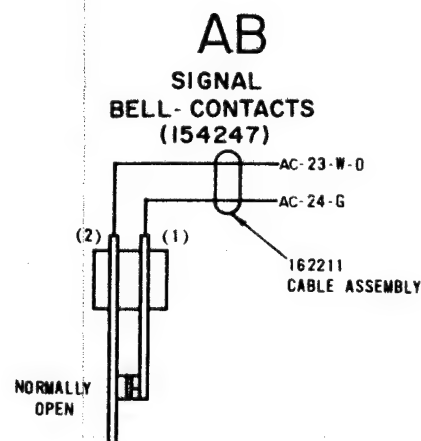
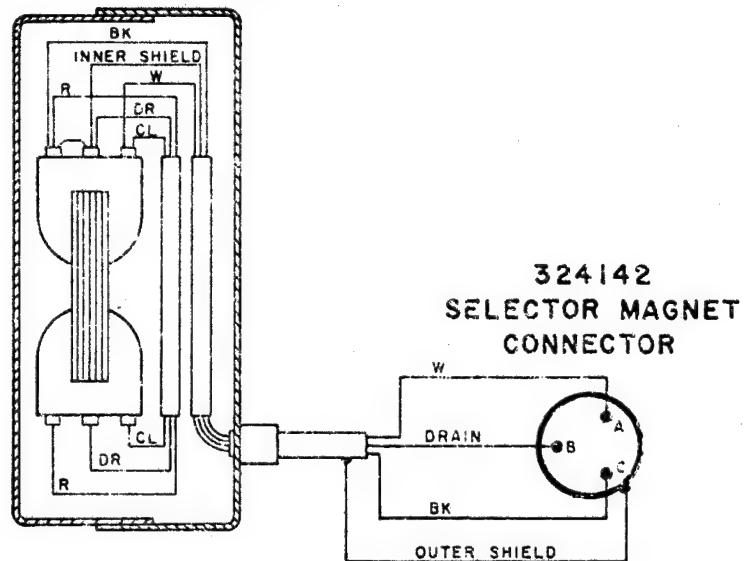
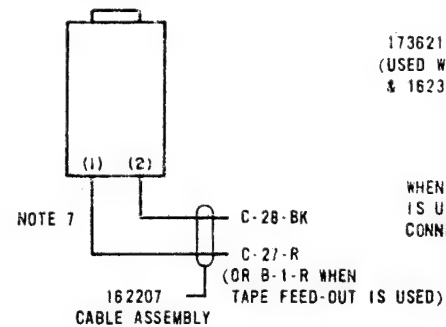


Figure 5-19. LPR Used with Modification Kit 323802 for Low-Level Operation, Wiring Diagram

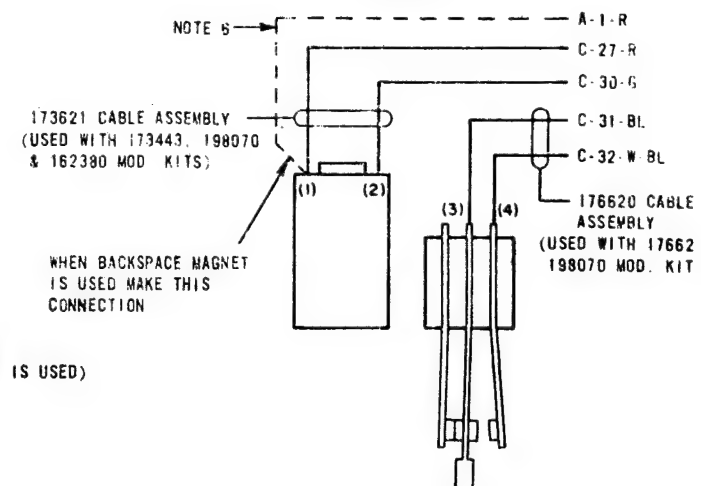
319230 SELECTOR MAGNETS



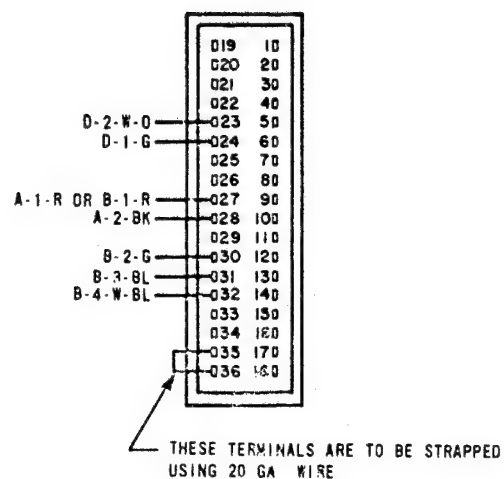
A 224M BACK SPACE MAGNET



B TAPE FEED-OUT MAGNET



C CONNECTOR 161238



D SIGNAL BELL OPERATING CONTACT 154247

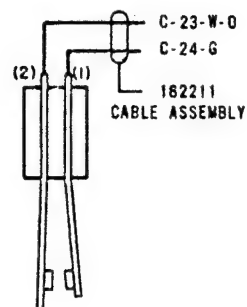


Figure 5-20. LPR and LRPE Typing and Non-Typing Reperforator with Selector Assembly, Wiring Diagram

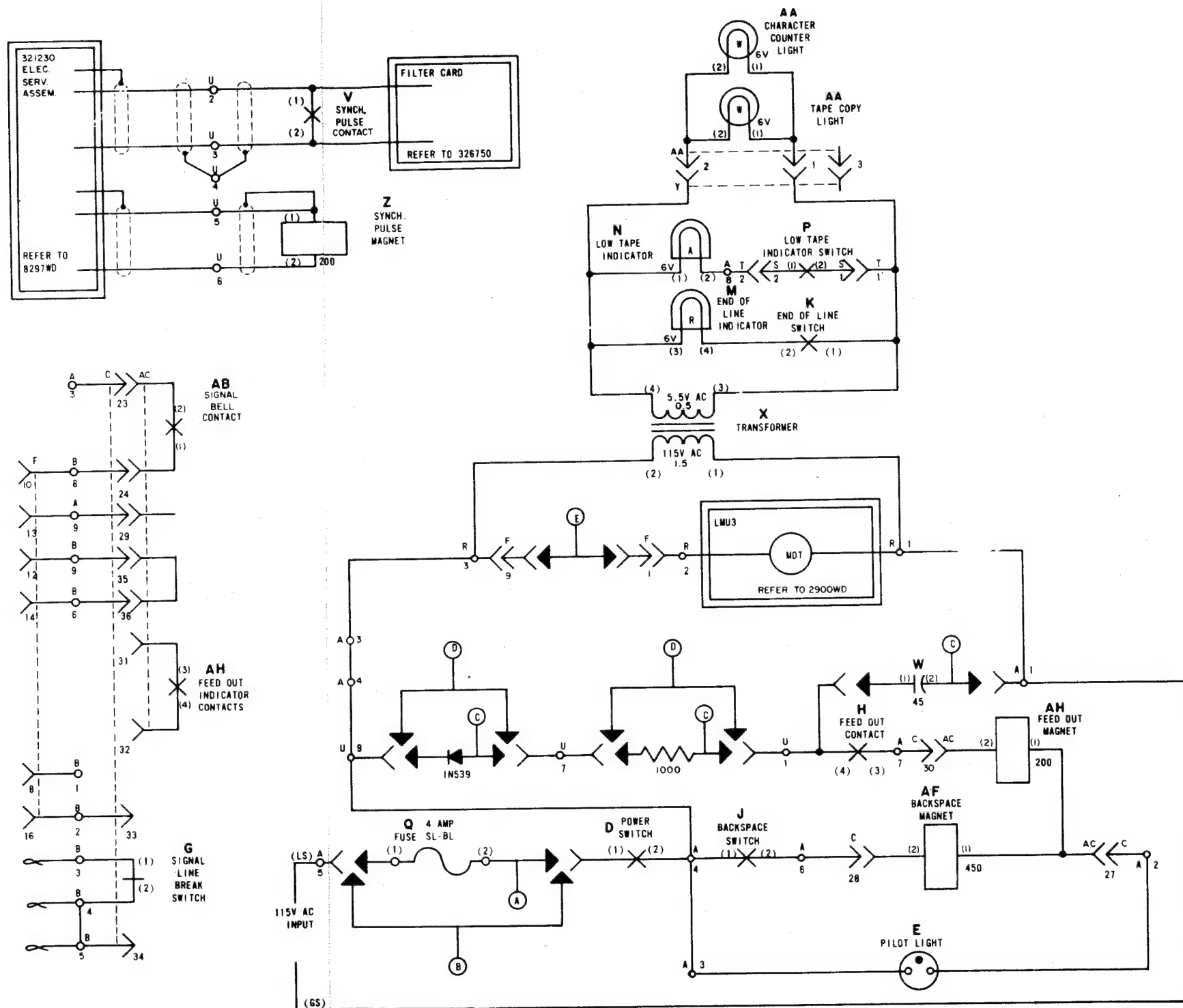
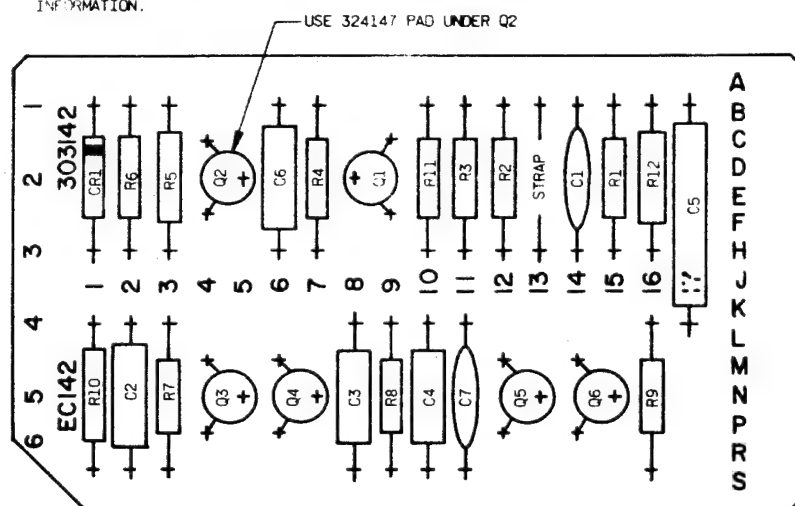


Figure 5-21. Send-Receive Typing Reperforator Set when Used with 323802 Modification Kit Schematic Diagram

REF. DESIG.	PART. NO. REQ.	QTY	DESCRIPTION	FUNCTION
R1	118178	2	RESISTOR 100K 5% 1/2W	RC FILTER
R2	118178	1	RESISTOR 220K 5% 1/2W	Q1 BASE BIAS
R3			RESISTOR SAME AS R1	Q1 EMITTER BIAS
R4	129854	2	RESISTOR 10K 5% 1/2W	Q1 COLLECTOR BIAS
R5	321204	2	RESISTOR 13K 1% 1/2W	Q2 COLLECTOR BIAS
R6			RESISTOR SAME AS R5	RC BIAS EQUALIZER
R7	118147	2	RESISTOR 6.8K 5% 1/2W	Q3,4 BASE BIAS
R8			RESISTOR SAME AS R4	Q5,6 BASE BIAS
R9	137438	1	RESISTOR 100Ω 5% 1/2W	RC FILTER
R10			RESISTOR SAME AS R7	Q3,4 BASE BIAS
R11	118146	2	RESISTOR 4.7K 5% 1/2W	Q1 EMITTER BIAS
R12			RESISTOR SAME AS R11	OUTPUT LOAD
CR1	181619	1	DIODE 1N482	R6 SHUNT SWITCH
C1	321157	2	CAPACITOR 500 PFD	INPUT FILTER
C2	320048	1	CAPACITOR .5 MFD.	ACTIVE FILTER FEEDBACK
C3	320049	2	CAPACITOR .15 MFD.	ACTIVE FILTER INTEGRATOR
C4			CAPACITOR SAME AS C3	RC FILTER INTEGRATOR
C5	320047	1	CAPACITOR 2 MFD	RC FILTER INTEGRATOR
Q1	315930	3	TRANSISTOR, 2N3568	1st AMPLIFIER
Q2	324144	1	TRANSISTOR 2N4121	2nd AMPLIFIER
Q3	315931	2	TRANSISTOR 2N3638	ACTIVE COMPLIMENTARY FILTER
Q4			TRANSISTOR SAME AS Q1	ACTIVE COMPLIMENTARY FILTER
Q5			TRANSISTOR SAME AS Q3	COMPLIMENTARY SYMMETRY
Q6			TRANSISTOR SAME AS Q1	FOLLOWER AMPLIFIER
C6	181618	1	CAPACITOR .01MFD	RC FILTER
C7			CAPACITOR SAME AS C1	RF BY PASS
EC	320051	1	BOARD, ETCHED CIRCUIT	
		1	STRAP, BARE 24 AWG.	
	324147	1	PAD, TRANSISTOR	
	144495	5	PAD, TRANSISTOR	

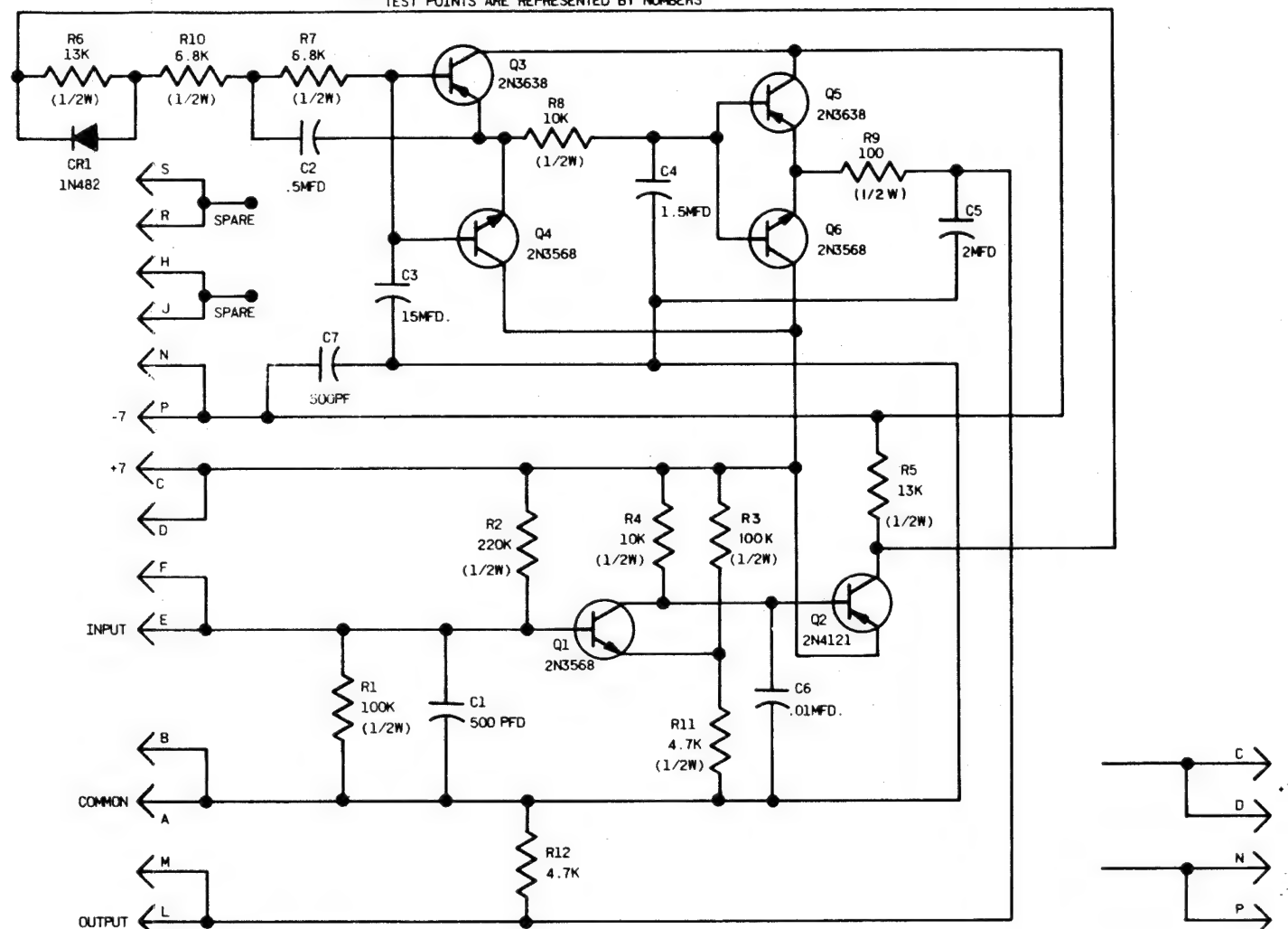
NOTE: MANUFACTURE PER MR200L
REFER TO 5016MD FOR MARKING
INFORMATION.



POLAR LINE KEYER $\pm 6V$

NAVELEX 0967-LP-616-7010

NOTE: CARD CONNECTIONS ARE REPRESENTED BY LETTERS
TEST POINTS ARE REPRESENTED BY NUMBERS



STAMPING ON CIRCUIT BOARD	NUMERICAL CONVERSION FOR 15 PT. CARDS WHEN USED WITH 36 PT. CONNECTOR	
	WHEN INSERTED IN UPPER HALF OF CONNECTOR	WHEN INSERTED IN LOWER HALF OF CONNECTOR
A	1	22
B	2	23
C	3	24
D	4	25
E	5	26
F	6	27
H	7	28
J	8	29
K	9	30
L	10	31
M	11	32
N	12	33
P	13	34
R	14	35
S	15	36

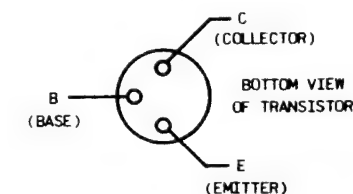


Figure 5-23. 303142 Polar Line Keyer $\pm 6V$ Schematic Diagram

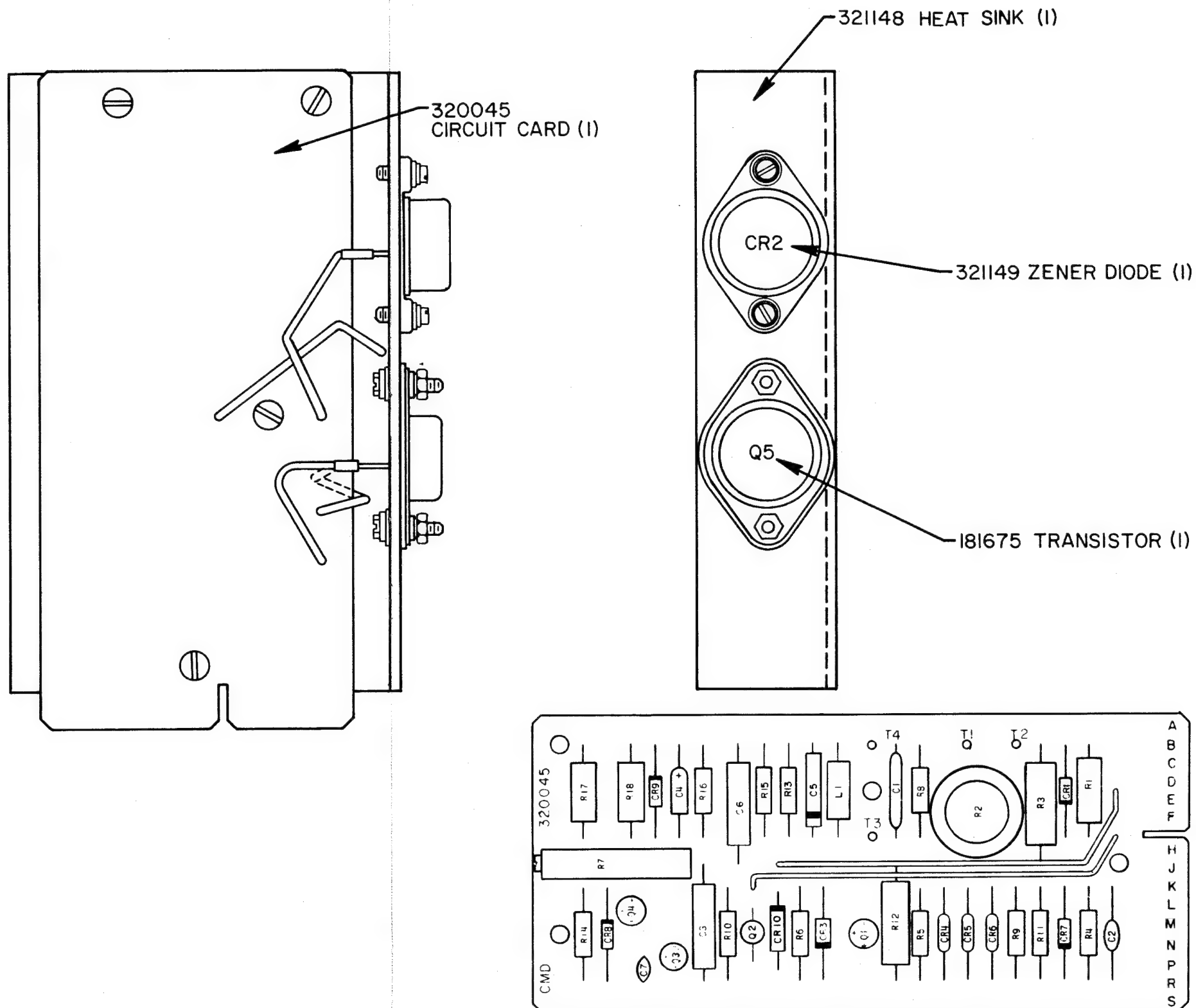


Figure 5-24. 321991 Circuit Card (CMD) Schematic Diagram (Sheet 1 of 2)

USED ON 321991
NO B/M

ASSEMBLY, CIRCUIT CARD (CMD)				
REF. DESIG.	TELETYPE PART NO.	TOTAL QTY.	NAME AND DESCRIPTION	LOCATING FUNCTION
R1	327793	1	RESISTOR, 18 OHM, 3W, 41%	REG CURRENT LIMITER
R2	182773	1	POTENTIOMETER, 3 OHM, 2.5W	REG CURRENT ADJ.
R3	321155	1	RESISTOR, 2K, 2W, 5%	Q1 CURRENT LIMITER
R4	118720	1	RESISTOR, 100K, 1/2W, 5%	Q1 OPEN LINE BIAS
R5	118720	1	RESISTOR, 100K, 1/2W, 5%	INPUT RESISTOR
R6	129854	1	RESISTOR, 10K, 1/2W	Q1 BIAS
R7	321160	1	POTENTIOMETER, 5M	Q1 BIAS
R8	118146	1	RESISTOR, 4.7K, 1/2W, 5%	Q1 EMITTER RES
R9	129850	1	RESISTOR, 680 OHM, 1/2W, 5%	VOLTAGE DIVIDER
R10	321258	1	RESISTOR, 20K, 1/2W, 5%	Q2 LOAD RES
R11	137604	1	RESISTOR, 620 OHM, 1/2W, 5%	VOLTAGE DIVIDER
R12	321292	1	RESISTOR, 1.3K, 2W, 5%	CR7 CURRENT LIMITER
R13	139143	1	RESISTOR, 43K, 1/2W, 5%	Q2 LOAD RES
R14	321259	1	RESISTOR, 15 OHM, 1/2W, 5%	Q3 EMITTER RES
R15	165178	1	RESISTOR, 3.6K, 1/2W, 5%	Q3 LOAD RES
R16	137442	1	RESISTOR, 1.5K, 1/2W, 5%	Q4 BLEEDER RES
R17	321151	1	RESISTOR, 110 OHM, 3W, 1%	COIL CURRENT LIMITER
R18	321258	1	RESISTOR, 20K, 1/2W, 5%	CR8 BIAS RES
C1	321158	1	CAPACITOR, .1 MFD.	R.F. BY-PASS CAP
C2	321157	1	CAPACITOR, 500 PFD.	R.F. BY-PASS CAP
C3	171829	1	CAPACITOR, .15 MFD.	Q3 FEEDBACK CAP
C4	321264	1	CAPACITOR, 50V, 2.7 MFD.	TRANSIENT SUPP.
C5	178860	1	CAPACITOR, 100V, .022 MFD.	R.F. BY-PASS
C6	171587	1	CAPACITOR, 200V, .25 MFD.	Q4 FEEDBACK CAP
C7	171583	1	CAPACITOR, .003 MFD.	R.F. BY-PASS CAP.
L1	321159	1	CHOKE, 390UH	R.F. CHOKE
CR1	321161	1	DIODE, 1N748A, 3.9V ± 5%	REG. VOLT. REF.
CR3	321154	1	DIODE, 1N457A	Q1 BASE PROT.
CR4	178844	1	VARIATOR, 100 A	TEMP. COMP.
CR5	178844	1	VARIATOR, 100 A	TEMP. COMP.
CR6	178844	1	VARIATOR, 100 A	TEMP. COMP.
CR7	187767	1	DIODE, 1N748A, 3.9V ± 5%	TEMP. COMP. REF.
CR8	177611	1	DIODE, 1N457A	Q4 EMITTER DIODE
CR9	321154	1	DIODE, 1N457A	TRANSIENT SUPP.
CR10	321154	1	DIODE, 1N457A	SHORT PROT.
Q1	321166	1	TRANSISTOR, 2N1893	D.C. AMP.
Q2	324144	1	TRANSISTOR, 2N4121	D.C. AMP.
Q3	321165	1	TRANSISTOR	D.C. AMP.
Q4	321261	1	TRANSISTOR, 2N4036	D.C. AMP.
	324147	1	PAD, TRANSISTOR	Q2
	144495	3	PAD, TRANSISTOR	Q1, Q3, Q4
	321299	1	CIRCUIT BOARD ETCHED	
	321171	2	LEAD (BK)	
T1-T4	137471	4	LUG, TERMINAL	

NOTE 4

NO	NOTES
1	ALL RESISTORS 1/2 WATT. ALL RESISTANCE VALUES IN OHMS AND ALL CAPACITANCE VALUES IN MFD. UNLESS OTHERWISE SPECIFIED.
2	Q5 (1B1675) AND CR2 (321149) ARE MOUNTED TO 321148 HEAT SINK. SEE CMD ASSEMBLY 321991.
3	R2 IS ADJUSTED FOR 15 MA IN CR2 WITH INPUT MARKING (6) AND OUTPUT CONNECTED TO A 150 OHM RESISTOR (5W).
4	R7 IS ADJUSTED FOR SYMMETRICAL SWITCHING ABOUT ZERO.
5	PINS A, B 140 MA TO COILS PINS R, S -6V DC PINS C, D +47 TO 53V DC POWER PINS E, F, H, J CONTROL CONTACT PROVISION PINS N, P 15 1888 SIGNAL INPUT PINS K, L, M COMMON (ALL INPUTS AND OUTPUTS REFERRED TO COMMON)
6	S-NUMBER 61,263\$

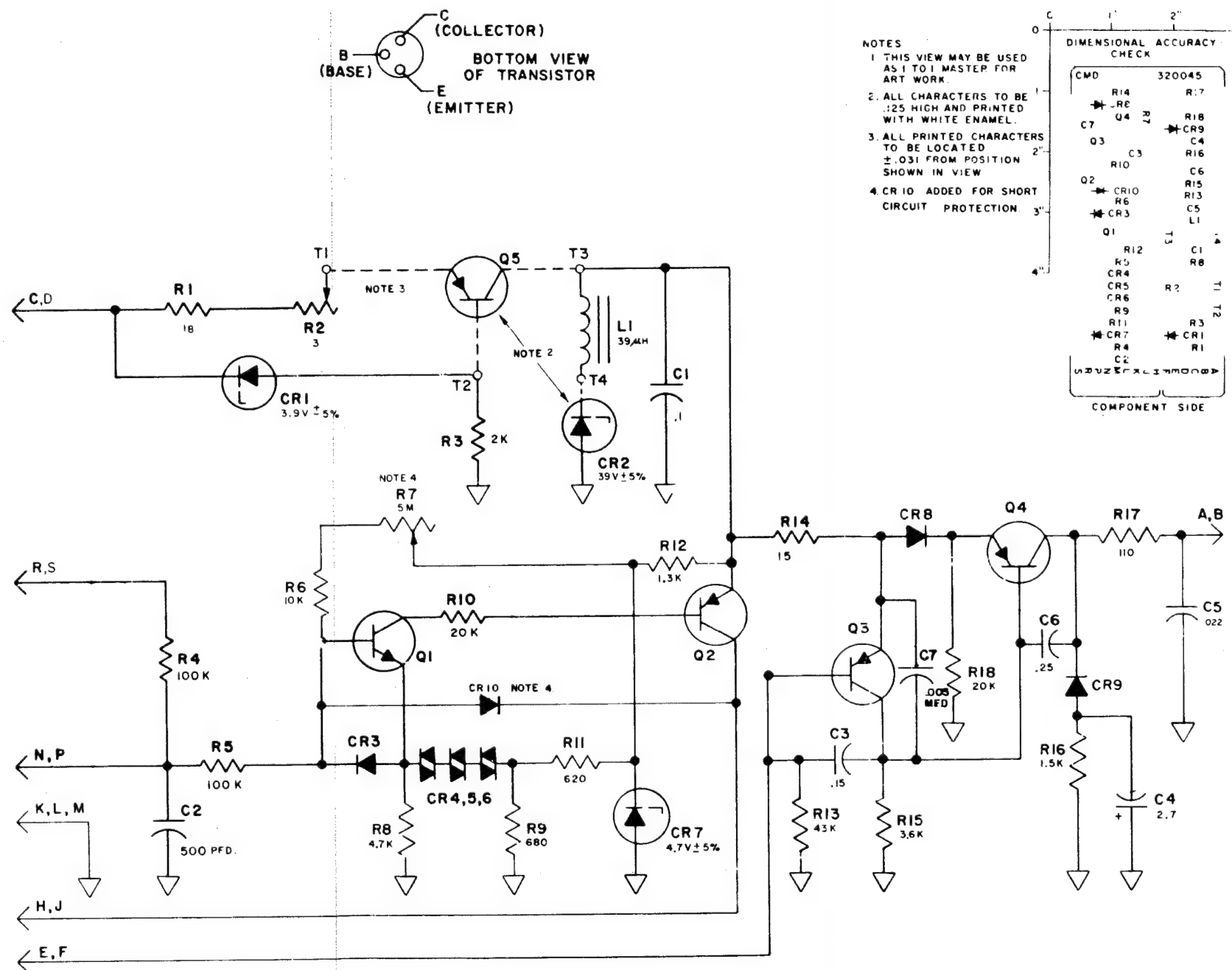
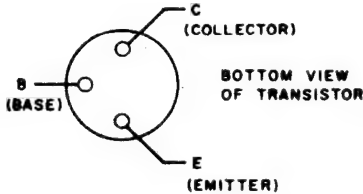
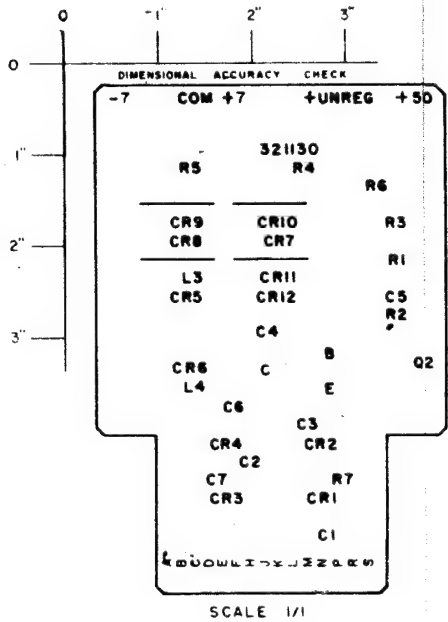


Figure 5-24. 321991 Circuit Card (CMD) Schematic Diagram (Sheet 2 of 2)

CIRCUIT BOARD ASSEMBLY, POWER SUPPLY (47-53V.D.C. .5AMP. MAX.)				
REF. DESIGN.	PART NO.	TOTAL QTY.	NAME AND DESCRIPTION	FUNCTION
C1	312284	1	CAPACITOR, 1.5 MFD 400V	RF FILTER
C2,3	171585	2	CAPACITOR, .22MFD 200V	RF FILTER
C4	171831	1	CAPACITOR, 10MFD 150V	RECTIFIER FILTER
C5	178860	1	CAPACITOR, .022MFD 100V	RF FILTER
C6,7	312365	2	CAPACITOR, .1MFD 10V	RF FILTER
R1	198937	1	RESISTOR, 2.7K 2W	
R2	182180	2	RESISTOR, 200 OHM 1/2W	
R3	171533	1	RESISTOR 4 OHM 5W	
R4,5	311664	2	RESISTOR, 2.5K 8W	DROPPING
R6			SAME AS R2	RF FILTER
R7	305298	1	RESISTOR, 3.3K 3W	BLEEDER
CR1-4	182520	4	DIODE (1N4383)	RECTIFIER
CR5,6	327794	2	DIODE, ZENER (7.2V)	REFERENCE
CR7	321286	2	DIODE, ZENER (1N4740A)	REFERENCE
CR8-11	178844	4	VARISTOR (W.E. 100A)	REFERENCE
CR12			SAME AS CR7	REFERENCE
L3,4	321159	2	INDUCTOR 39 uH	RF FILTER
Q2	321145	1	TRANSISTOR (2N2270)	GAIN
FC1,2	311068	2	FUSE CLIP	
F102	131807	1	FUSE .5 AMP.	
TP1	320042	1	JACK, TEST (SLATE)	
TP2	320041	1	JACK, TEST (GREEN)	
TP3	320039	1	JACK, TEST (BLACK)	
TP4	320040	1	JACK, TEST (ORANGE)	
TP5	320038	1	JACK, TEST (RED)	
P1-3	137471	3	TERMINAL POST	CONNECTOR
	321140	1	CIRCUIT CARD	
S1-S4	336470	4		
1	151637	2	SCREW 4-40	
2	151880	2	NUT 4-40	
3	110743	2	LOCK WASHER	
4	125011	2	FLAT WASHER	

CIRCUIT DESCRIPTION (SEE SHEET 2)

DIODES CR1 AND CR3 FORM A RECTIFIER WITH ASSOCIATED TRANSFORMER (321123) T1 AND CAPACITOR C8 (321129) TO OBTAIN A MINIMUM +58V DC UNREGULATED. Q1 IS AN EMITTER FOLLOWER VOLTAGE REGULATING ELEMENT WHICH ABSORBS THE VOLTAGE DIFFERENCE BETWEEN THE UNREGULATED DC AND THE CONSTANT +50V DC REFERENCE ESTABLISHED BY DIODES CR7-CR12. Q2 PROVIDES GAIN FOR Q1. DIODES CR3, CR4, TRANSFORMER T1 AND CAPACITOR C4 FORM A FULL WAVE RECTIFIER TO OBTAIN NEGATIVE UNREGULATED DC. R4 AND CR6, R5 AND CR5 FORM BASIC SHUNT REGULATORS TO OBTAIN +7 AND -7V DC.



- 1) TELETYPE REFERENCE ONLY: SPECIFICATION 61,267S
- 2) SEE SHEET 2 FOR SCHEMATIC WIRING
- 3) ALL CHARACTERS TO BE .125 HIGH AND PRINTED WITH WHITE ENAMEL.
- 4) ALL PRINTED CHARACTERS TO BE LOCATED ±.031 FROM NOMINAL POSITION.

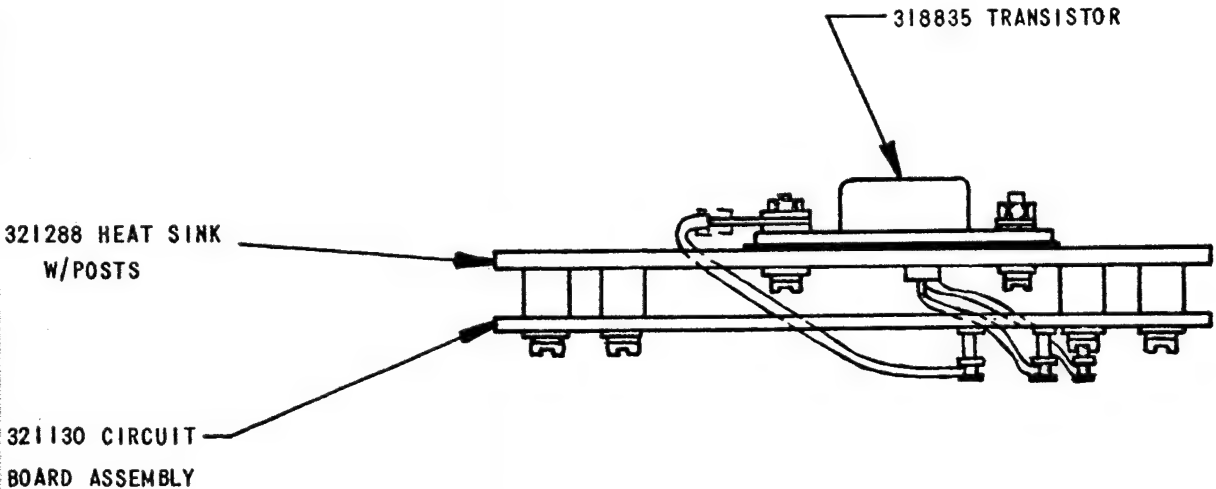
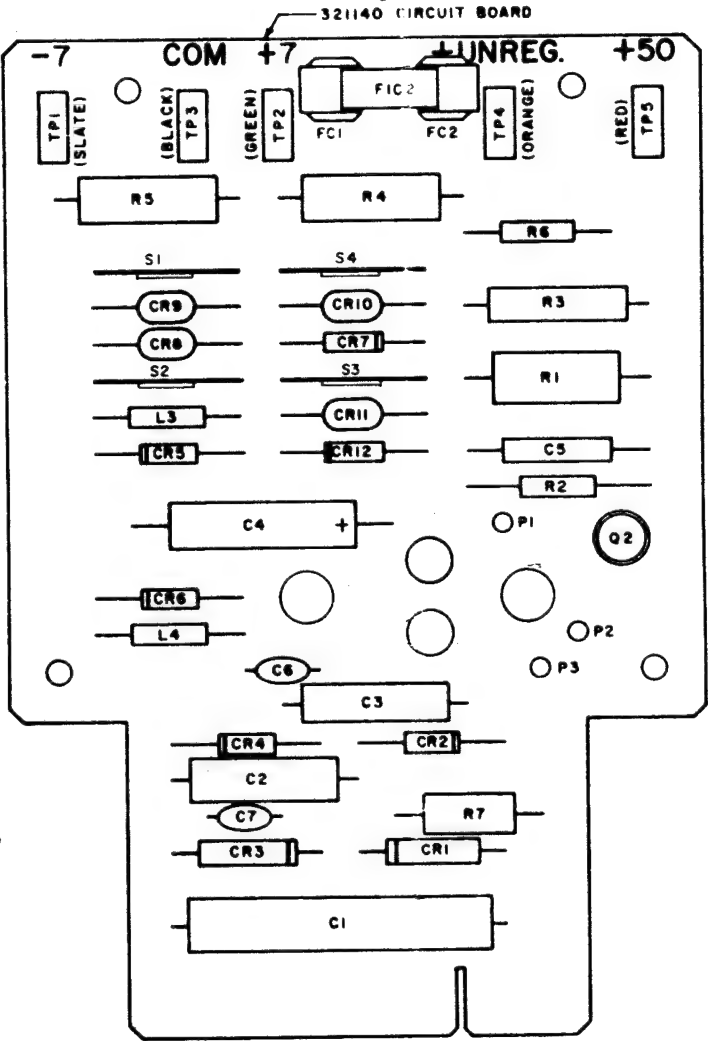


Figure 5-25. 321290 Circuit Card Schematic Diagram (Sheet 1 of 2)

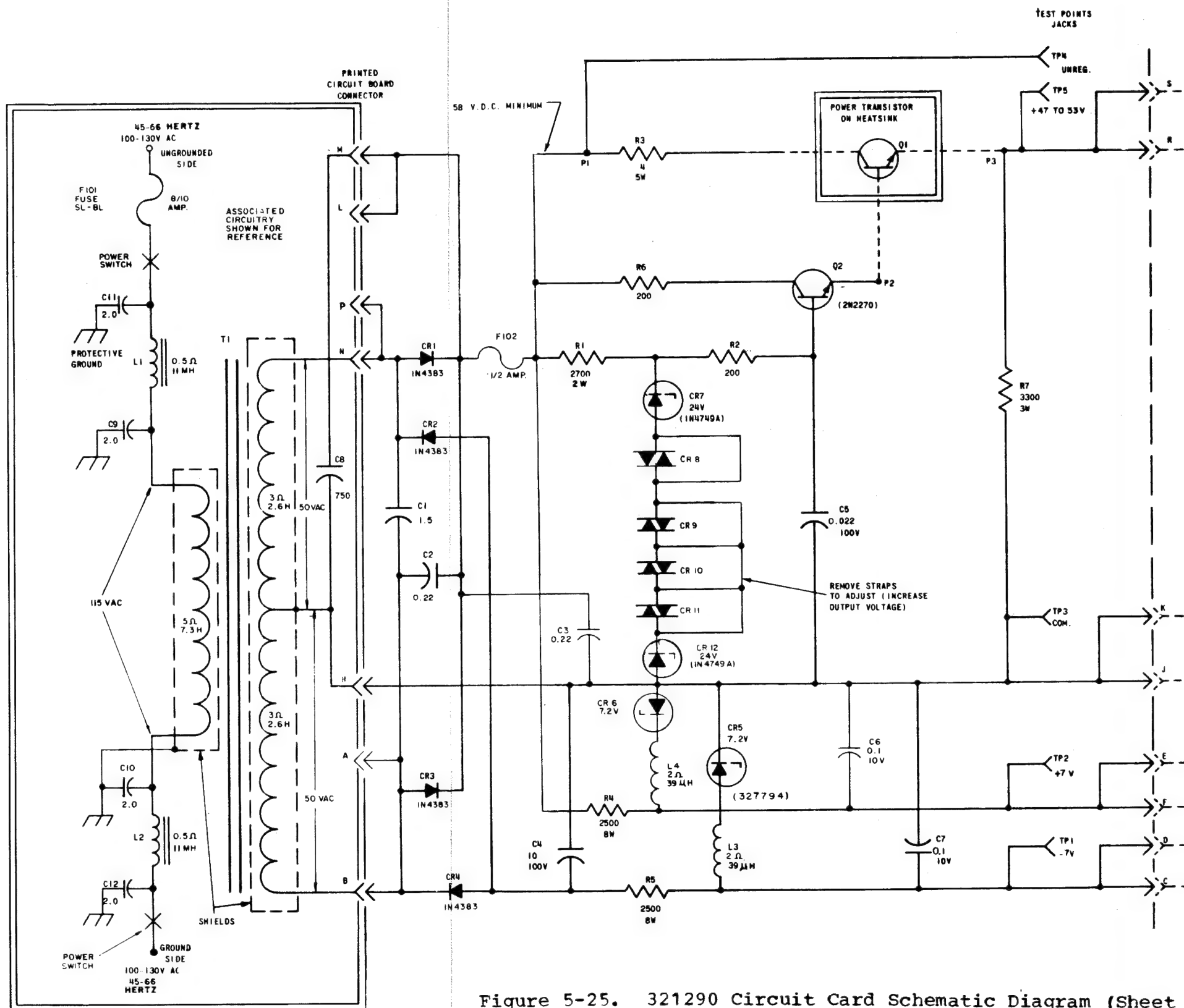
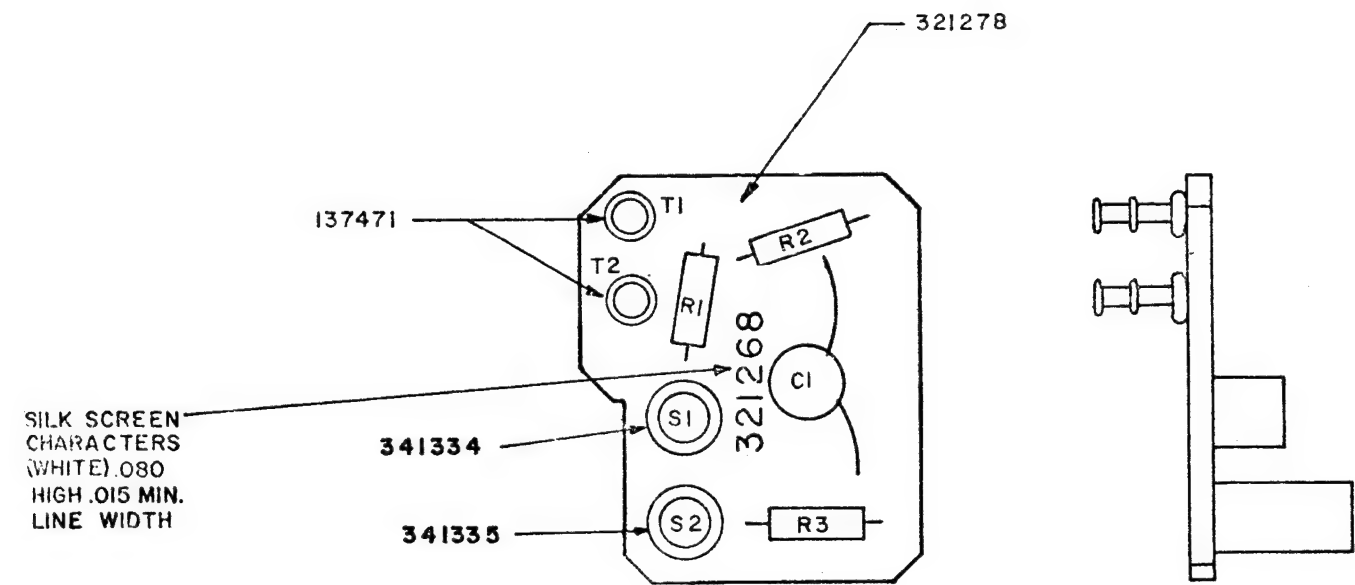
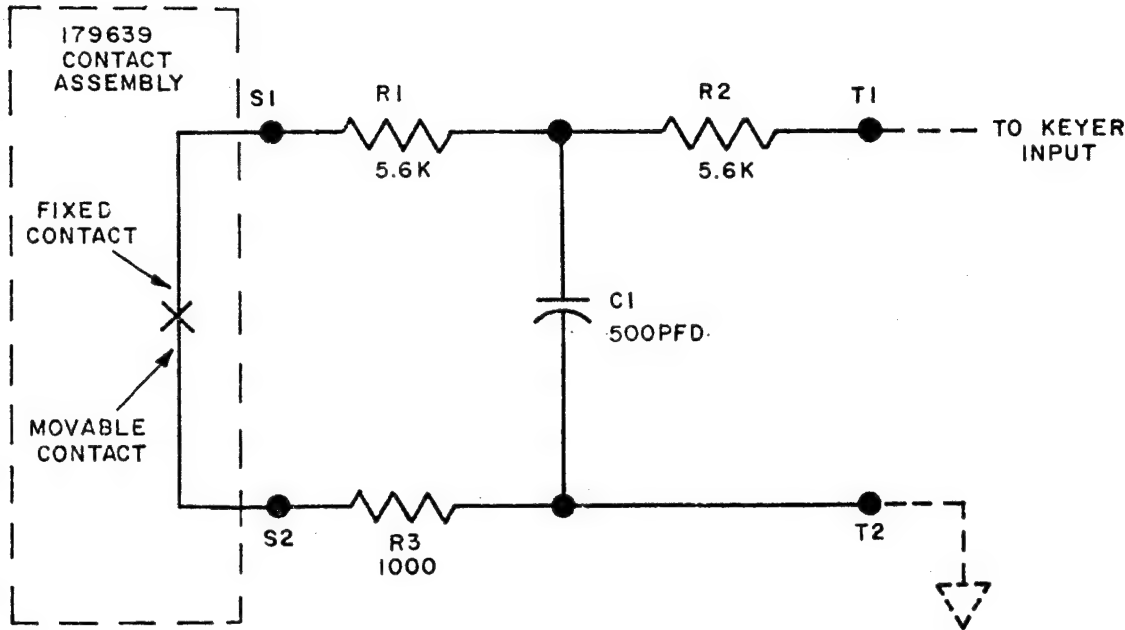


Figure 5-25. 321290 Circuit Card Schematic Diagram (Sheet 2 of 2)

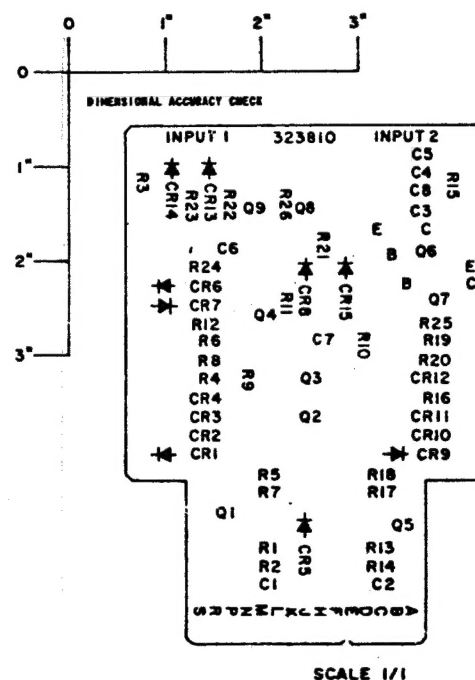
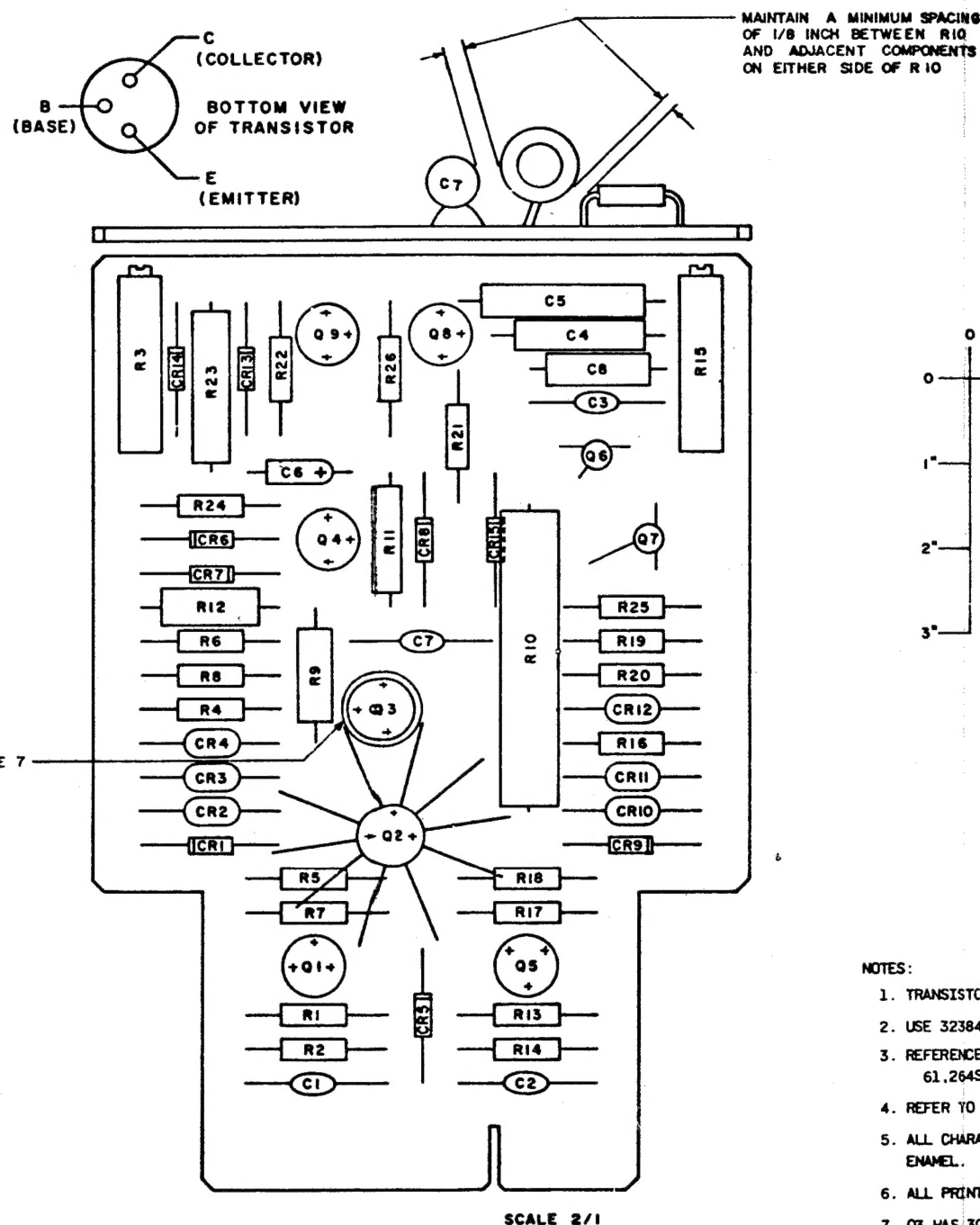


REF. DESIGN	TELETYPE PART NO.	TOTAL QTY.	NAME AND DESCRIPTION	LOCATING FUNCTION
R1	315960	2	RESISTOR, 5.6 K 1/4 WATT	RC FILTER
R2	"		SAME AS R1	"
R3	321213	1	RESISTOR, 1000 Ω 1/4 WATT	"
C1	321157	1	CAPACITOR, 500 PFD	"
T1	137471	2	TERMINAL, SOLDER	
T2	"		"	
S1	341334	1	STUD, CONNECTOR	
S2	341335	1	"	
321278	321278	1	BOARD, ETCHED CIRCUIT	



NOTE:
DASHED LINES INDICATE EXTERNAL CIRCUITRY.

Figure 5-26. 321268 Filter Card Assembly Schematic Diagram

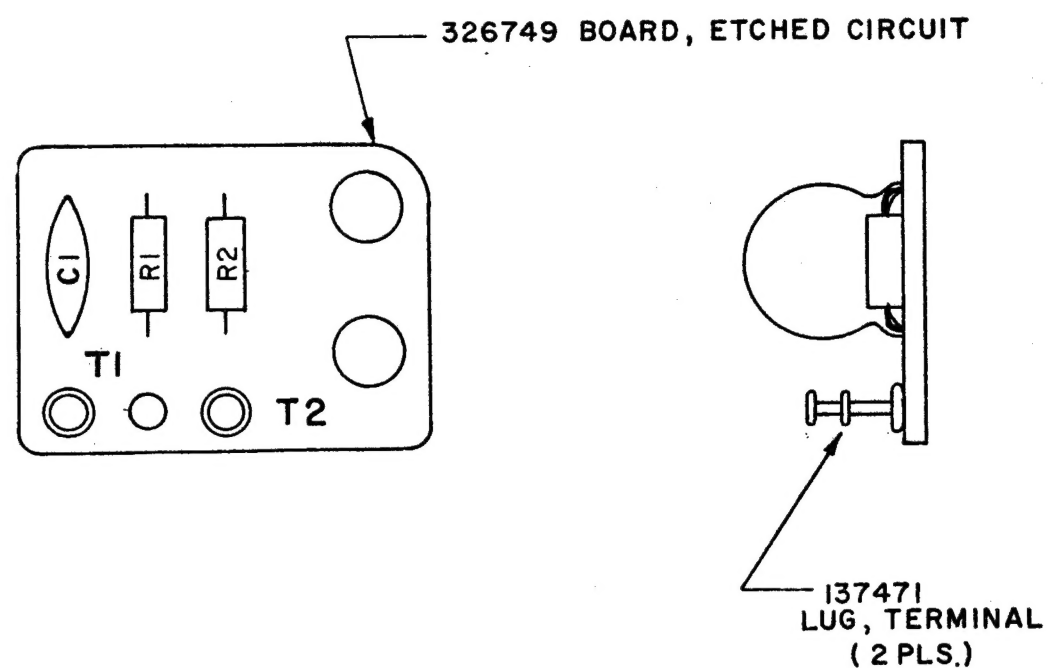
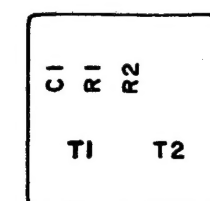
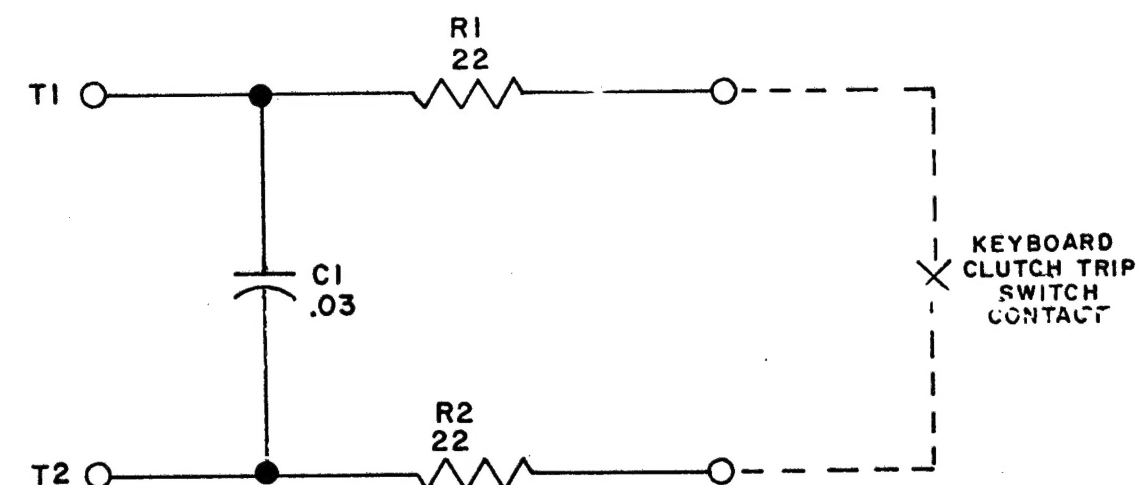


NOTES:

1. TRANSISTOR Q2 HAS 323847 HEAT SINK PRESSED ON.
2. USE 323846 TRANSISTOR PAD UNDER TRANSISTOR Q3.
3. REFERENCE SPECIFICATION FOR TELETYPE CORP. EMPLOYEES ONLY: 61.2645
4. REFER TO 8143WD FOR SCHEMATIC WIRING DIAGRAM.
5. ALL CHARACTERS TO BE .125 HIGH AND PRINTED WITH WHITE ENAMEL.
6. ALL PRINTED CHARACTERS TO BE LOCATED +.031 FROM NOMINAL.
7. Q3 HAS 300116 INSULATING COVER. POSITION Q3 (WITH COVER) SO THAT 323847 HEAT SINK MAY BE FULLY SEATED ON Q2.
8. 144495 TRANSISTOR PAD REQUIRED ON Q1, Q4, Q5, Q8 AND Q9, AND Q2
9. PARTS CHANGED FOR STANDARDIZATION WERE FORMERLY AS FOLLOWS: CR1, CR9, CR14 — 321154 (IN457A) AND CR6, CR7, CR13, CR15 — 321156 (IN482A).

REF. DESIG.	TELETYPE PART NO.	TOTAL QTY.	NAME AND DESCRIPTION	LOCATING FUNCTION
C1	321157	1	CAPACITOR, 500 pF	R.F. BY-PASS CAP.
C2	321157	1	CAPACITOR, 500 pF	R.F. BY-PASS CAP.
C3	321157	1	CAPACITOR, 500 pF	R.F. BY-PASS CAP.
C4	171829	1	CAPACITOR, .15 MFD	Q8 FEEDBACK CAP.
C5	326776	1	CAPACITOR, .47 MFD	Q9 FEEDBACK CAP.
C6	321260	1	CAPACITOR, 1 MFD 50V	TRANSIENT SUPP.
C7	321157	1	CAPACITOR, 500 pF	R.F. BY-PASS CAP.
C8	178840	1	CAPACITOR, .022 MFD	R.F. BY-PASS CAP.
R1	118720	1	RESISTOR, 100K, 1/2W	Q1 OPEN LINE BIAS
R2	118720	1	RESISTOR, 100K, 1/2W	INPUT 1 RES
R3	323846	1	POTENTIOMETER 500K	Q1 BIAS
R4	129854	1	RESISTOR, 10K, 1/2W	Q1 BIAS
R5	118177	1	RESISTOR, 22K, 1/2W	Q1 LOAD RES.
R6	137604	1	RESISTOR, 620, 1/2W	VOLTAGE DIVIDER
R7	118146	1	RESISTOR, 4.7K, 1/2W	Q1 EMITTER RES.
R8	129850	1	RESISTOR, 680, 1/2W	VOLTAGE DIVIDER
R9	309666	1	RESISTOR, 1.5K, 3W	CR5 CURRENT LIMITER
R10	323841	1	RESISTOR, 300, 12 W	Q2 LOAD RES.
R11	323842	1	RESISTOR, 21, 1/2W, 15	REG. CURRENT SET
R12	178844	1	RESISTOR, 3.9K, 1W	CR8 CURRENT LIMITER
R13	118720	1	RESISTOR, 100K 1/2W	Q5 OPENLINE BIAS
R14	118720	1	RESISTOR, 100K, 1/2W	INPUT 2 RES.
R15	323844	1	POTENTIOMETER 500K	Q5 BIAS
R16	129854	1	RESISTOR, 10K, 1/2W	Q5 BIAS
R17	118177	1	RESISTOR, 22K, 1/2W	Q5 LOAD RES.
R18	118146	1	RESISTOR, 4.7K, 1/2W	Q5 EMITTER RES.
R19	137604	1	RESISTOR, 620, 1/2W	VOLTAGE DIVIDER
R20	129850	1	RESISTOR, 680, 1/2W	VOLTAGE DIVIDER
R21	321975	1	RESISTOR, 33, 1/2W	Q8 EMITTER RES.
R22	118177	1	RESISTOR, 22K, 1/2W	CR13 BIAS RES.
R23	323843	1	RESISTOR, 500, 5W, 15	COIL CURRENT LIMITER
R24	137442	1	RESISTOR, 1.5K, 1/2W	Q6 BLEEDER RES.
R25	118154	1	RESISTOR 47K, 1/2W	Q6, Q7 LOAD RES.
R26	120424	1	RESISTOR 4.3K, 1W	Q8 LOAD RES.
CR1	197464	7	DIODE, NOTE 9	Q1 BASE PROT.
CR2	178844	1	VARISTOR, 100-A	TEMP. COMP.
CR3	178844	1	VARISTOR, 100-A	TEMP. COMP.
CR4	178844	1	VARISTOR, 100-A	TEMP. COMP.
CR5	181667	1	DIODE, 1N750A	TEMP. COMP. REF.
CR6			SAME AS CR1	Q4 COLLECTOR CLAMP
CR7			" " " "	Q4 COLLECTOR CLAMP
CR8	321161	1	DIODE, 1N748A	REG. VOLT REF.
CR9			SAME AS CR1	Q5 BASE PROT.
CR10	178844	1	VARISTOR, 100-A	TEMP. COMP.
CR11	178844	1	VARISTOR, 100-A	TEMP. COMP.
CR12	178844	1	VARISTOR, 100-A	TEMP. COMP.
CR13			SAME AS CR1	Q9 EMITTER DIODE
CR14			" " " "	TRANSIENT SUPP.
CR15			" " " "	Q8 EMITTER DIODE
Q1	321164	1	TRANSISTOR, 2N1893	DC AMP.
Q2	323844	1	TRANSISTOR, 2N3053	SHUNT REG.
Q3	321261	1	TRANSISTOR, 2N4036	SHUNT REG. AMP.
Q4	323845	1	TRANSISTOR, 40319	SERIES REG.
Q5	321166	1	TRANSISTOR, 2N1893	DC AMP.
Q6	324166	2	TRANSISTOR, 2N4121	DC AMP.
Q7			SAME AS Q6	
Q8	321165	1	TRANSISTOR, 2N3638A	DC AMP.
Q9	321261	1	TRANSISTOR, 2N4036	DC AMP.
	325187	2	PAD, TRANSISTOR	
	144495	4	PAD, TRANSISTOR	
	323846	1	PAD, TRANSISTOR	
	323847	1	HEAT SINK	
	323835	1	CIRCUIT BOARD, ETCHED	
	300116	1	COVER, INSULATING	

Figure 5-27. 323810 Circuit Assembly (SMD with Signal Combiner)
(Sheet 1 of 2)

[illegible]

NOTE :

ALL CHARACTERS TO BE .080 HIGH AND LOCATED $\pm .015$ FROM NOMINAL POSITION. (WHITE ENAMEL)

SCALE 1/1

SILK SCREENING
INFORMATION

Figure 5-28. 326750 Filter Card Assembly Schematic

